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2019年互联网趋势报告

Internet Trends 2019

Mary Meeker

June 11 @ Code 2019



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INTERNET TRENDS 2019 2019年互联网趋势报告

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中文版制作: 腾讯科技

2019年互联网趋势报告

- 1) 用户
- 2) 电子商务+广告
- 3) 使用...
- 4) 免费增值业务模式
- 5) 数据增长
- 6) ...使用方法
- 7) 工作
- 8) 教育
- 9) 移民+美国企业
- 10) 医疗保健
- 11) 中国 (数据由高瓴资本集团提供)

中文版制作: 腾讯科技

鸣谢

券商合作伙伴

迈克尔·布罗根 (Michael Brogan) 和安塞尔·帕里克 (Ansel Parikh) 帮助指导了方向，还承担了很多繁重的工作。诺亚·科纳夫 (Noah Knauf) 、科林·埃伯特 (Collin Ebert) 、杰西·埃林沃思 (Jesse Ellingworth) 和朱丽叶·德·鲍比尼 (Juliet de Baubigny) 亦对此作出了贡献。

高瓴资本

感谢吴亮 (Liang Wu) 及其同事对本报告中国部分，也就是全球最大互联网用户市场的研究贡献。

互联网连接演进的参与者们

从本报告创造者到我们全天候关注的消费者以及所有直接帮助我们准备此报告的人。同时，我们特别感谢卡拉及其团队对此所作出的贡献。

内容

我们使用数据来讲述我们所关注的与业务相关的趋势故事。我们希望别人接受我们的想法，并因此而变得更好。当前互联网用户人数已经达到38亿，占世界总人口的一半以上。当市场进入主流阶段后，就很难找到新的增长点，其中最明显的一点就是新智能手机出货量在2018年迎来下降。尽管电子商务在实体零售中的份额继续上升，但增长速度却在放缓。同时，互联网广告增长强劲&创新态势十分健康。

在一些领域，新客户的获取成本可能已经上升到不可持续的水平。在互联网用户增长放缓的同时，全球创新和竞争继续推动着产品改进、催生新的使用方法和投入商用——特别是在数字视频、语音、可穿戴设备、按需服务+本地服务&传统上服务不足的领域。在美国以外的地方，我们专注于在数据驱动/直接交付和金融服务方面的高增长和创新。在互动游戏、通信工具、免费增值业务的大规模普及情况下，我们特别关注与图像演变相关的大规模全球使用变化情况。快速增长的收集/分析数据往往是我们这个时代全球最成功公司的核心要素。

上下文背景丰富的数据可以帮助企业为消费者提供日益个性化的产品和服务，这些产品和服务通常可以以更低的价格获得并使之更有效地交付，这反过来也推高了客户满意度。更好的数据驱动工具可以改善消费者直接或间接与企业和监管机构之间的沟通。核心成分（即消费者/企业/监管机构）正越来越多地从数据洪流中汲取营养，而各方所面临的管理挑战也在继续增加。对挑战的广泛认识（或者是相关的激烈辩论）可能是推动变革的第一步。

内容

消费者意识到对互联网使用过量的担忧，并正在采取措施减少使用。比如，领先的美国互联网平台推出了帮助监控互联网和社交媒体使用情况的工具。经过一段时期的强劲增长后，互联网使用量似乎正在减速。隐私和问题内容的关注也十分重要，并遵循着类似的模式。

由于社交媒体的扩大化，对事件的揭露/行动/反应很快就会发生——这既会产生好的结果，也会产生坏的结果。对存在在线实时评级系统的市场中，当消费者可以和企业直接互动时，问责制与离线选项相比可以得到改进，监管机构也可以从中受益。

迅速扩大的互联网连通性帮助放大了好、坏两种声音，这为全球各地监管机构带来了一个新的“古老挑战”，即寻找到最有效的放大方法去求同存异，但这经常导致不同区域对政策的不同解读。随着互联网系统变得越来越复杂、数据越来越丰富、任务越来越关键，遭受网络攻击的机会也越来越多。

我们正处在一个网络安全的新时代，在这个时代的技术问题开始越来越多的与国际外交和国防问题交织在一起。我们的重点是研究互联网对工作（包括通过按需服务和远程选项）、教育和医疗保健所产生的影响。我们同时围绕政府财政&移民对科技行业的重要性更新了美国互联网趋势。

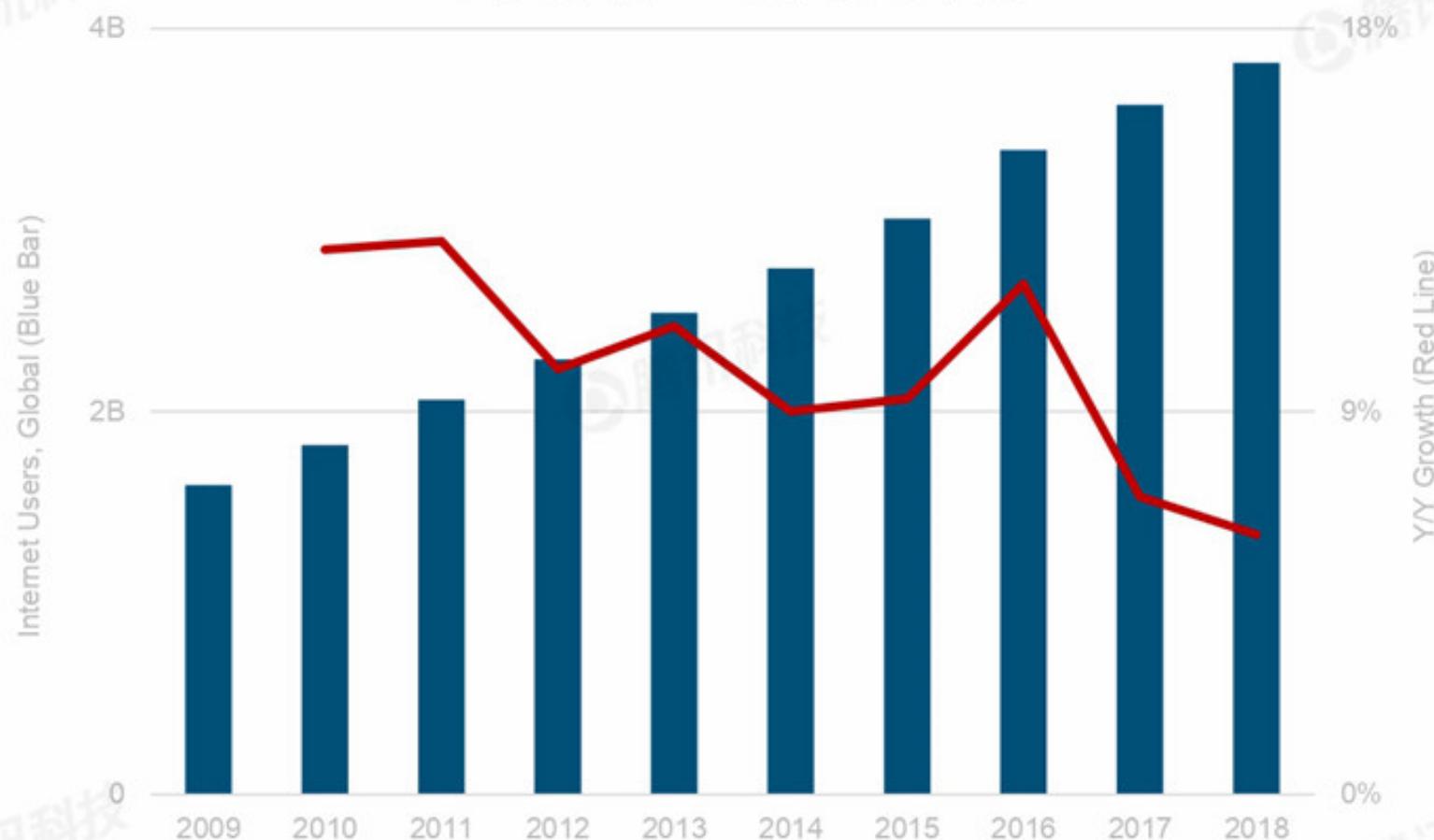
互联网用户：

@ >全球50%的渗透率…

新的增长点仍然难以寻觅

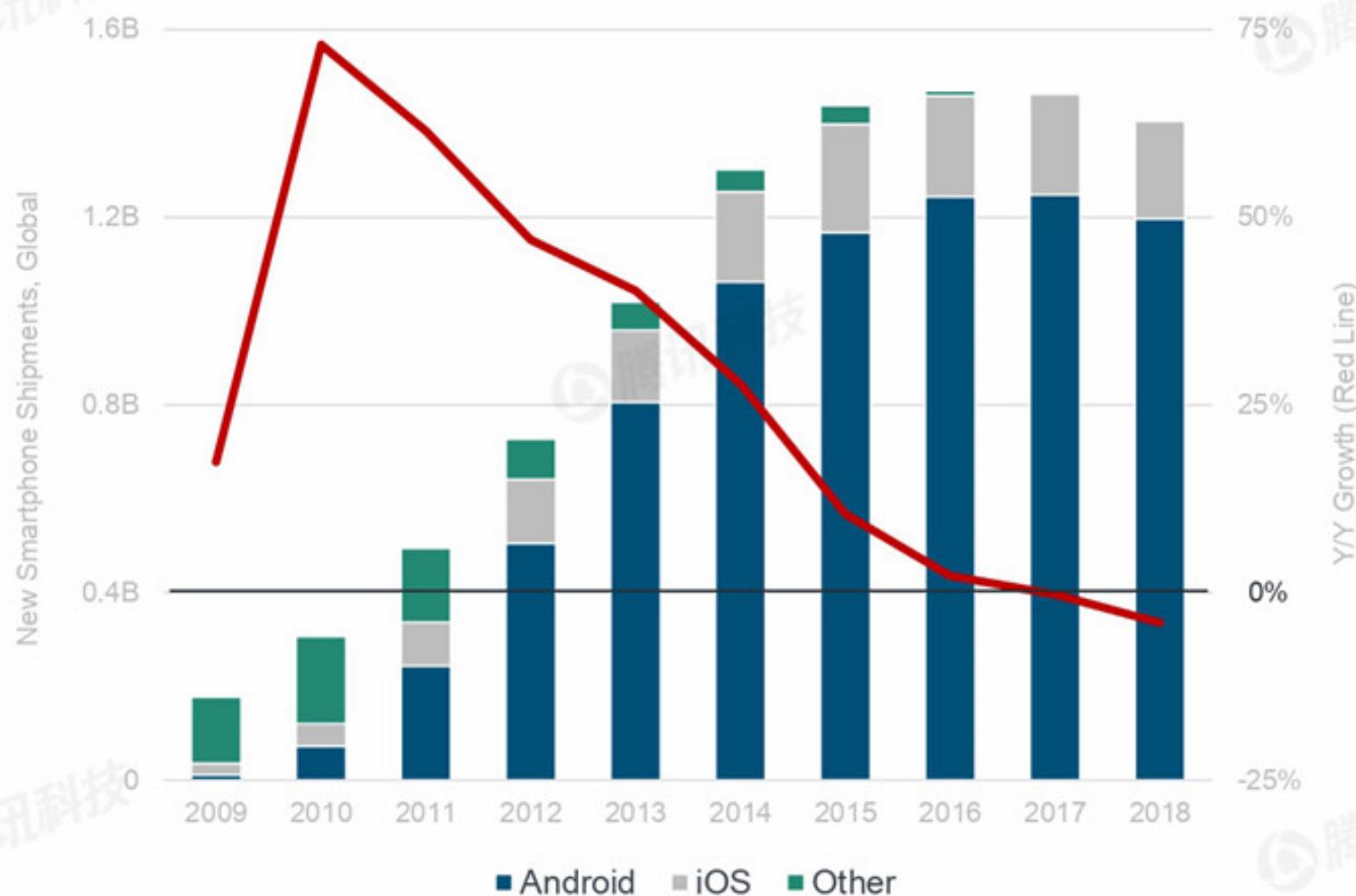
全球互联网用户增长： 稳定，但减速为增长6%，2017年同期同比增长为7%

互联网用户与同比增长



全球新智能手机出货量： 下降4%，2017年同期为持平

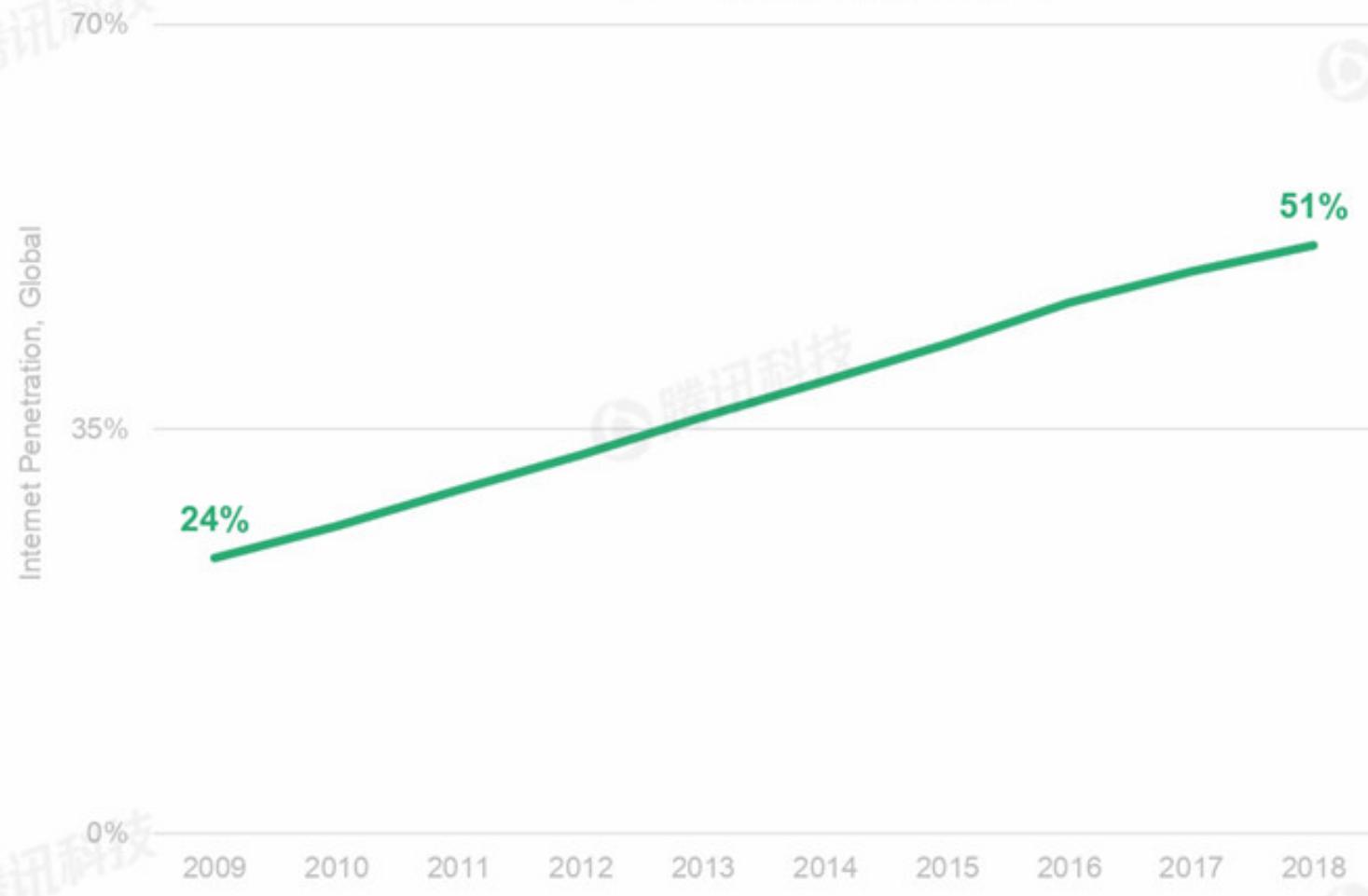
新智能手机出货量与同比增长



Source: Katy Huberty @ Morgan Stanley (3/19), IDC.

全球互联网用户： 38亿人，超过全球人口的50%

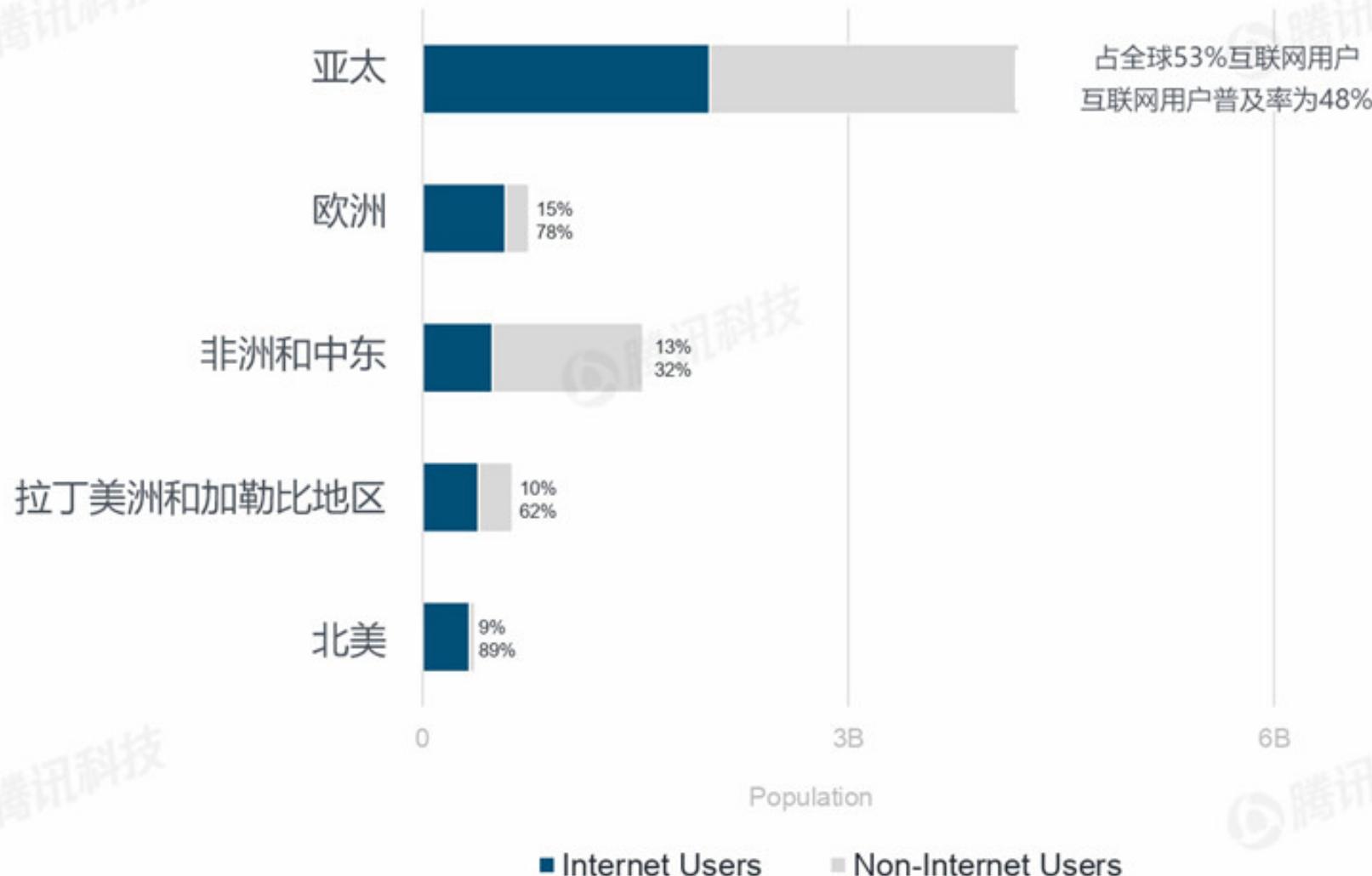
2018年互联网渗透率



Internet user data is as of mid-year. Source: United Nations / International Telecommunications Union, USA Census Bureau, Pew Research (USA), China Internet Network Information Center (China), Islamic Republic News Agency / InternetWorldStats / Bond estimates (Iran), Bond estimates based on IAMAI data (India), & APJII (Indonesia).

全球互联网用户： 亚太地区用户领先+潜力巨大

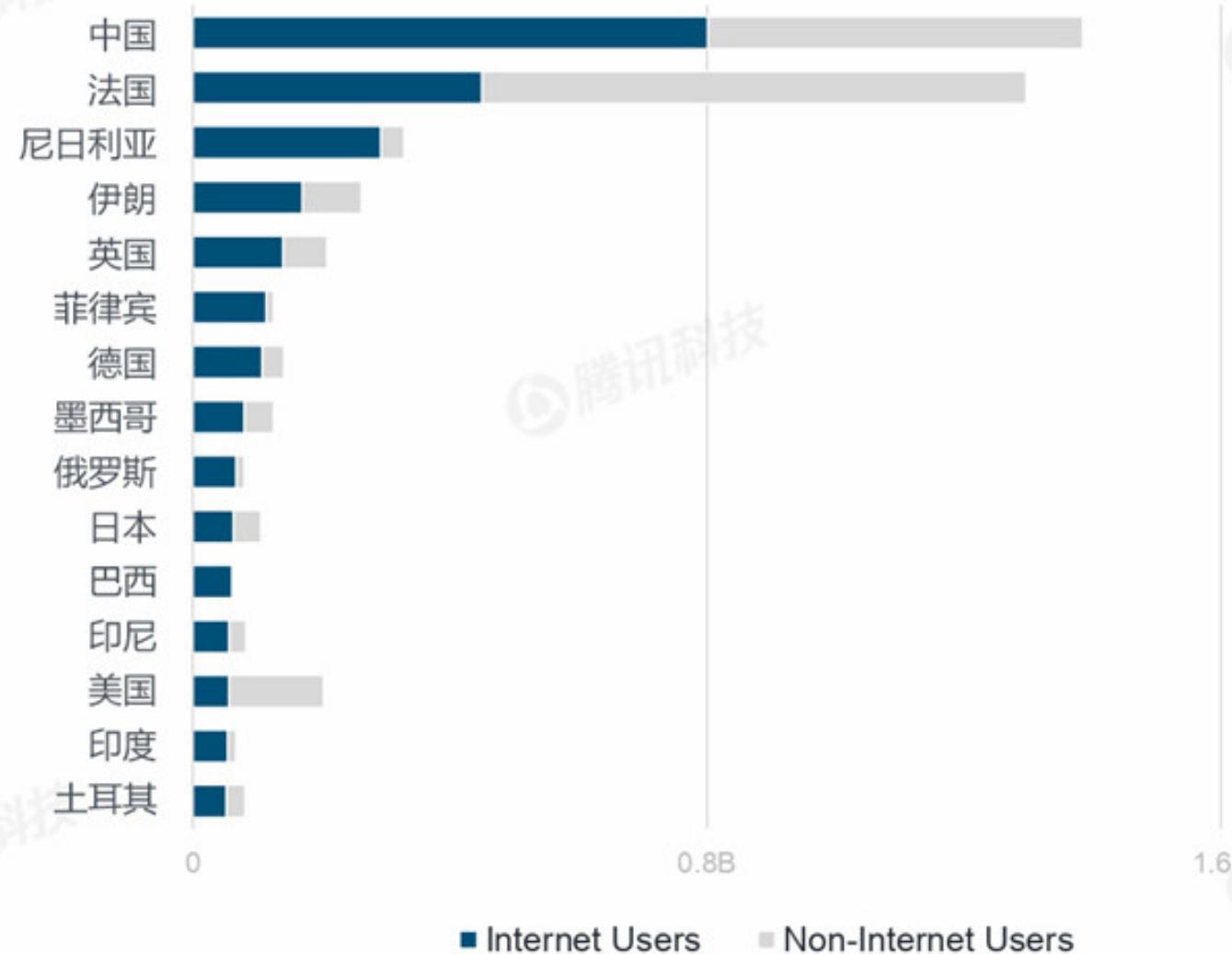
2018年按区域划分的互联网用户数



Internet user data is as of mid-year. Source: United Nations / International Telecommunications Union, USA Census Bureau, Pew Research (USA), China Internet Network Information Center (China), Islamic Republic News Agency / InternetWorldStats / Bond estimates (Iran), Bond estimates based on IAMAI data (India), & APJII (Indonesia).

全球互联网用户： 中国占21%，印度占12%，美国占8%

2018年度排名靠前的互联网用户国家/地区



Internet user data is as of mid-year. Source: United Nations / International Telecommunications Union, USA Census Bureau; Pew Research (USA), China Internet Network Information Center (China), Islamic Republic News Agency / InternetWorldStats / Bond estimates (Iran), Bond estimates based on IAMAI data (India), & APJII (Indonesia).

全球互联网企业市值领导者： 美国稳定占据30个中的18个，中国稳定占据30个中的7个

Rank 2019	Company	Region	Market Cap Value (\$B)		
			6/7/19	6/7/16	% Change
1	Microsoft	USA	\$1,007B	\$410B	+146%
2	Amazon	USA	888	343	+159%
3	Apple	USA	875	540	+62%
4	Alphabet	USA	741	497	+49%
5	Facebook	USA	495	340	+46%
6	Alibaba	China	402	195	+106%
7	Tencent	China	398	206	+93%
8	Netflix	USA	158	43	+266%
9	Adobe	USA	136	50	+174%
10	PayPal	USA	134	46	+190%
11	Salesforce	USA	125	56	+123%
12	Booking.com	USA	77	67	+15%
13	Uber	USA	75	--	--
14	Recruit Holdings	Japan	52	20	+167%
15	ServiceNow	USA	51	12	+316%
16	Workday	USA	48	16	+197%
17	Meituan Dianping	China	44	--	--
18	JD.com	China	39	32	+22%
19	Baidu	China	38	60	(36%)
20	Activision Blizzard	USA	35	28	+25%
21	Shopify	Canada	34	2	+1,297%
22	NetEase	China	33	23	+44%
23	eBay	USA	33	28	+19%
24	Atlassian	Australia	32	5	+509%
25	MercadoLibre	Argentina	30	6	+388%
26	Twitter	USA	29	11	+173%
27	Square	USA	29	3	+808%
28	Electronic Arts	USA	29	23	+25%
29	Xiaomi	China	28	--	--
30	Spotify	Sweden	25	--	--
Total			\$6,119	\$3,064	

USA stable at 18 of 30 refers to the fact that 19 USA companies were in the top 30 using same parameters in 2018. China in 2018 = 8 of 30.

Note: % change only applies to companies that were publicly traded on 6/7/16, private valuations not taken into account. Reflects a global list of publicly traded companies, some companies (e.g., Meituan Dianping) derive the majority of their revenue from one country. Companies selected are considered to be 'pureplay' Internet companies that do not derive a significant portion of revenues / profits from other business lines. Example companies that would be included otherwise = Reliance Industries (Refining), AT&T (Telecom), & Naspers (Television).

全球市值领导企业： 美国稳定占据30个中的23个，其中科技企业牢牢占据9个位置

Rank	2019 Company	Sector	Region	Market Cap Value (\$B)		
				6/7/19	6/7/16	% Change
1	Microsoft	Technology	USA	\$1,007B	\$410B	+146%
2	Amazon	Technology	USA	888	343	+159%
3	Apple	Technology	USA	875	540	+62%
4	Alphabet	Technology	USA	741	497	+49%
5	Berkshire Hathaway	Financial Services	USA	505	350	+44%
6	Facebook	Technology	USA	495	340	+46%
7	Alibaba	Technology	China	402	195	+106%
8	Tencent	Technology	China	398	206	+93%
9	Visa	Financial Services	USA	372	192	+94%
10	Johnson & Johnson	Healthcare	USA	368	318	+16%
11	JPMorgan	Financial Services	USA	354	239	+48%
12	Exxon Mobil	Energy	USA	316	371	(15%)
13	Nestlé	Food / Beverages	Switzerland	306	230	+33%
14	Walmart	Retail	USA	303	221	+37%
15	ICBC	Financial Services	China	285	224	+27%
16	Procter & Gamble	Home Goods	USA	273	220	+24%
17	Mastercard	Financial Services	USA	271	106	+156%
18	Bank of America	Financial Services	USA	262	149	+76%
19	Royal Dutch Shell	Energy	Netherlands	259	198	+31%
20	Samsung	Technology	South Korea	249	166	+50%
21	Disney	Media	USA	248	160	+55%
22	Cisco	Technology	USA	239	146	+64%
23	Pfizer	Pharmaceuticals	USA	238	212	+12%
24	AT&T	Telecom	USA	237	242	(2%)
25	Verizon	Telecom	USA	237	207	+15%
26	UnitedHealth	Healthcare	USA	235	131	+79%
27	Roche	Healthcare	Switzerland	233	224	+4%
28	Chevron	Energy	USA	231	191	+21%
29	Coca-Cola	Food / Beverages	USA	220	196	+12%
30	Home Depot	Retail	USA	217	161	+35%
Total				\$11,264	\$7,385	

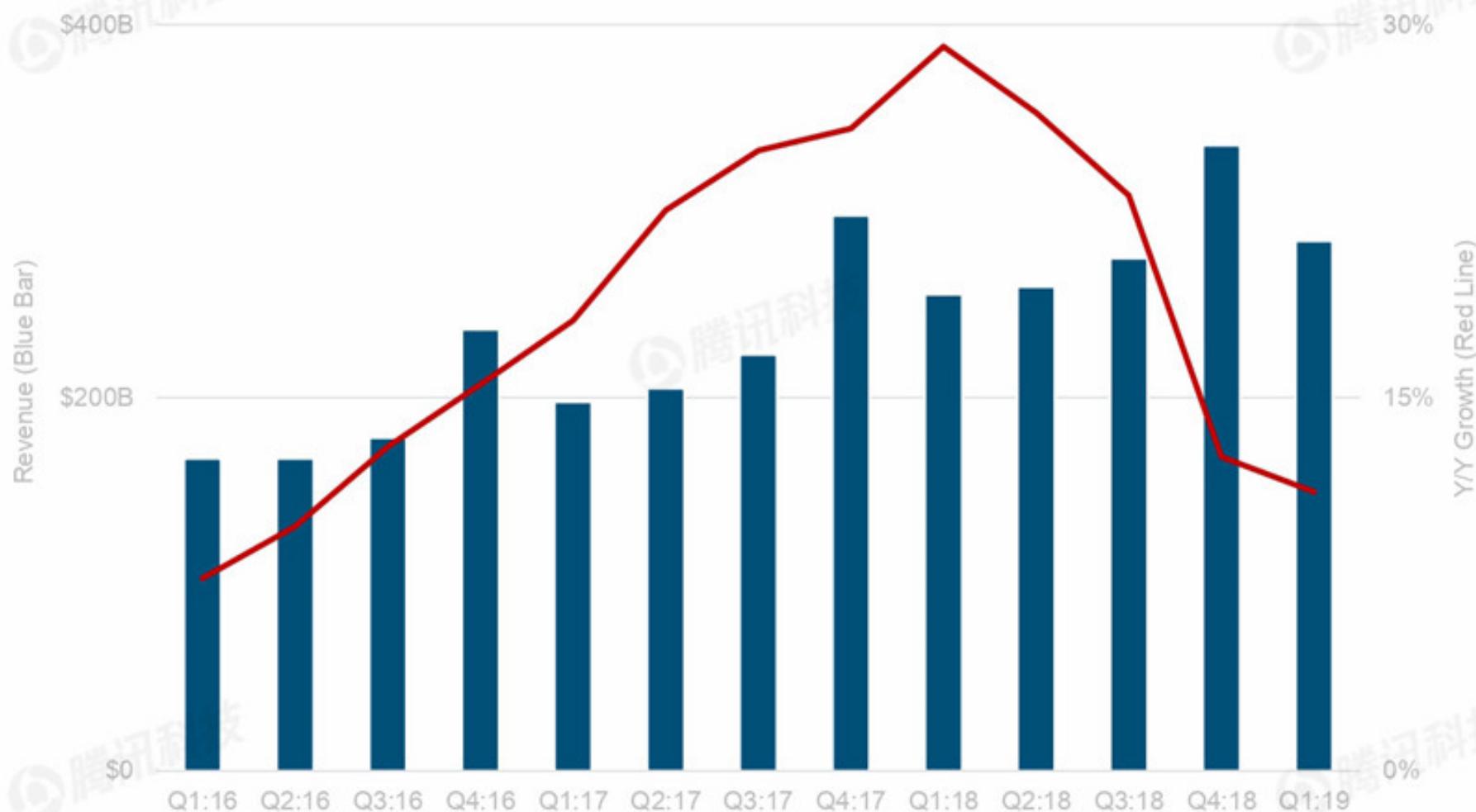
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USA stable at 23 of 30 refers to the fact that 21 USA companies were in the top 30 using same parameters in 2018. Technological companies are defined as companies whose primary revenue comes from technology products or services.

Source: CapitalIQ data collected 6/7/19. Reflects a global list of publicly traded companies, some companies (e.g., ICBC) derive the majority of their revenue from one country.

全球互联网企业市值领导者营收增长 同比增长减速11%，去年Q4环比Q1增长率为13%

全球互联网领导者营收与同比增长



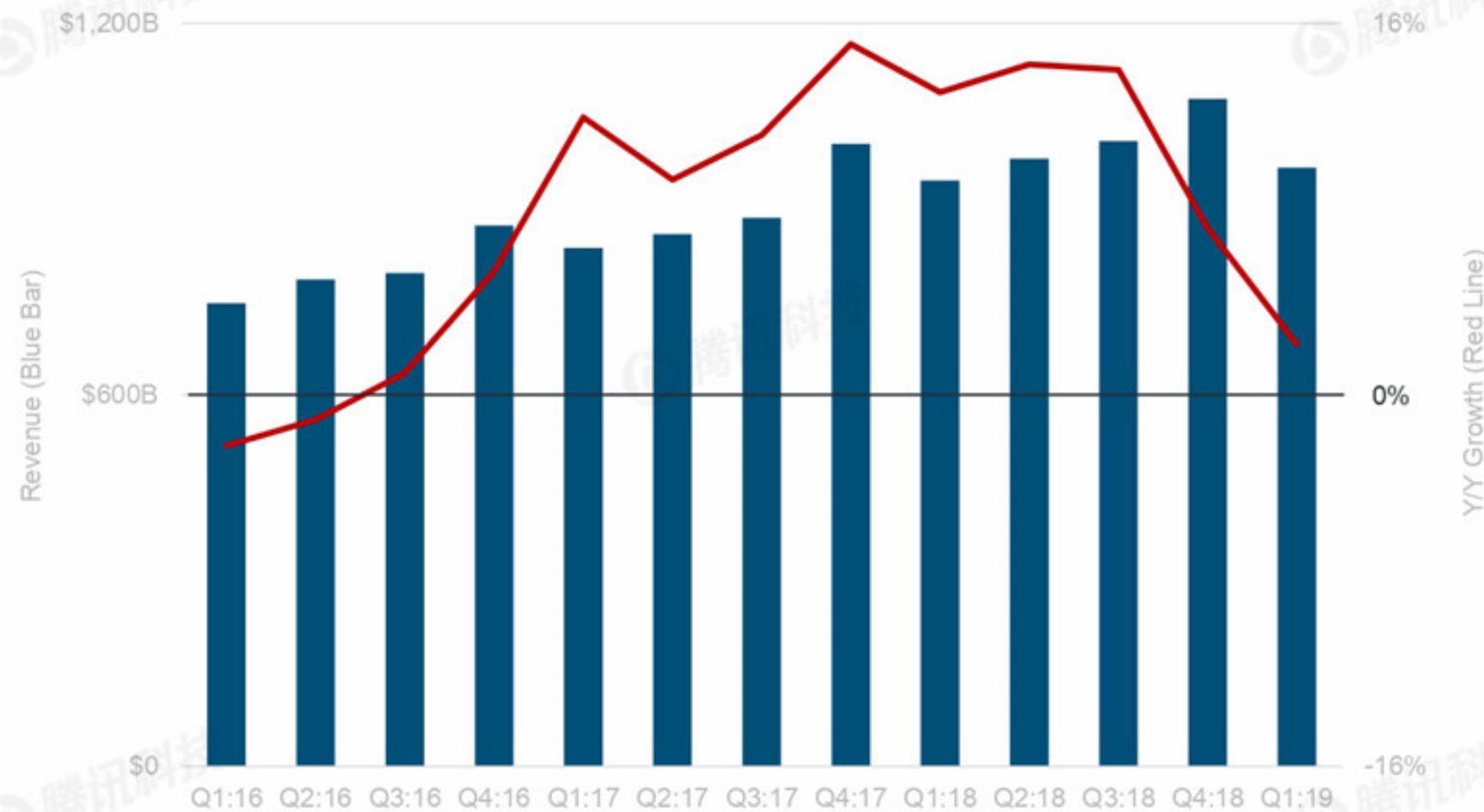
Source: CapitalIQ. Revenue from Microsoft / Amazon / Apple / Alphabet / Facebook / Tencent / Alibaba / Netflix / Adobe / PayPal / ServiceNow / Workday / JD.com / Baidu / Activision Blizzard / Shopify / NetEase / eBay / Atlassian / MercadoLibre / Electronic Arts / Twitter / Square / Recruit Holdings / Meituan Dianping.

Note: *Uber, Meituan Dianping, Xiaomi and Spotify which had recent IPOs that did not provide detailed financials from Q1:15-Q4:16 that are necessary to illustrate the Y/Y growth rate & are therefore excluded. Due to their revenue scale relative to the cumulative group, they have minimal impact on overall growth rate.

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全球市值领导企业营收增长 同比增长2%，去年Q4环比Q1增长率为7%

全球市值领导企业营收与同比增长



Source: CapitalIQ. Revenue from Microsoft / Amazon / Apple / Alphabet / Berkshire Hathaway / Facebook / Tencent / Alibaba / JPMorgan / Exxon Mobil / Walmart / ICBC / Procter & Gamble / Bank of America / Samsung / Disney / Cisco / Pfizer / AT&T / Verizon / UnitedHealth / MasterCard / Chevron / Coca-Cola / Home Depot. Nestle & Royal Dutch Shell quarterly revenue excluded due to bi-annual earnings releases.

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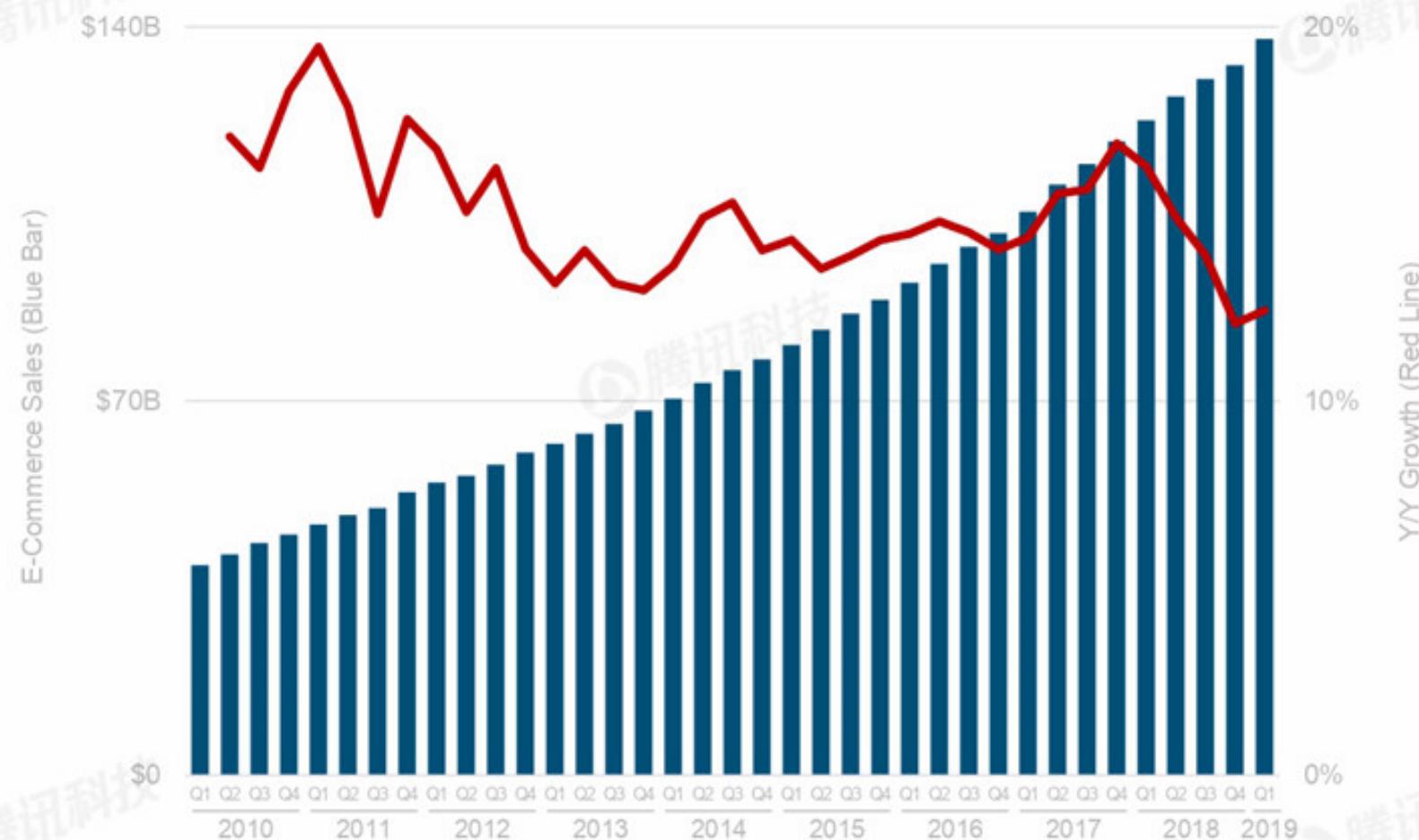
电子商务+在线广告 稳定，但增长缓慢

电子商务

电子商务增长

同比稳定增长12.4%，去年Q4环比Q1增长率为12.1%

美国电子商务销售额与年增长率

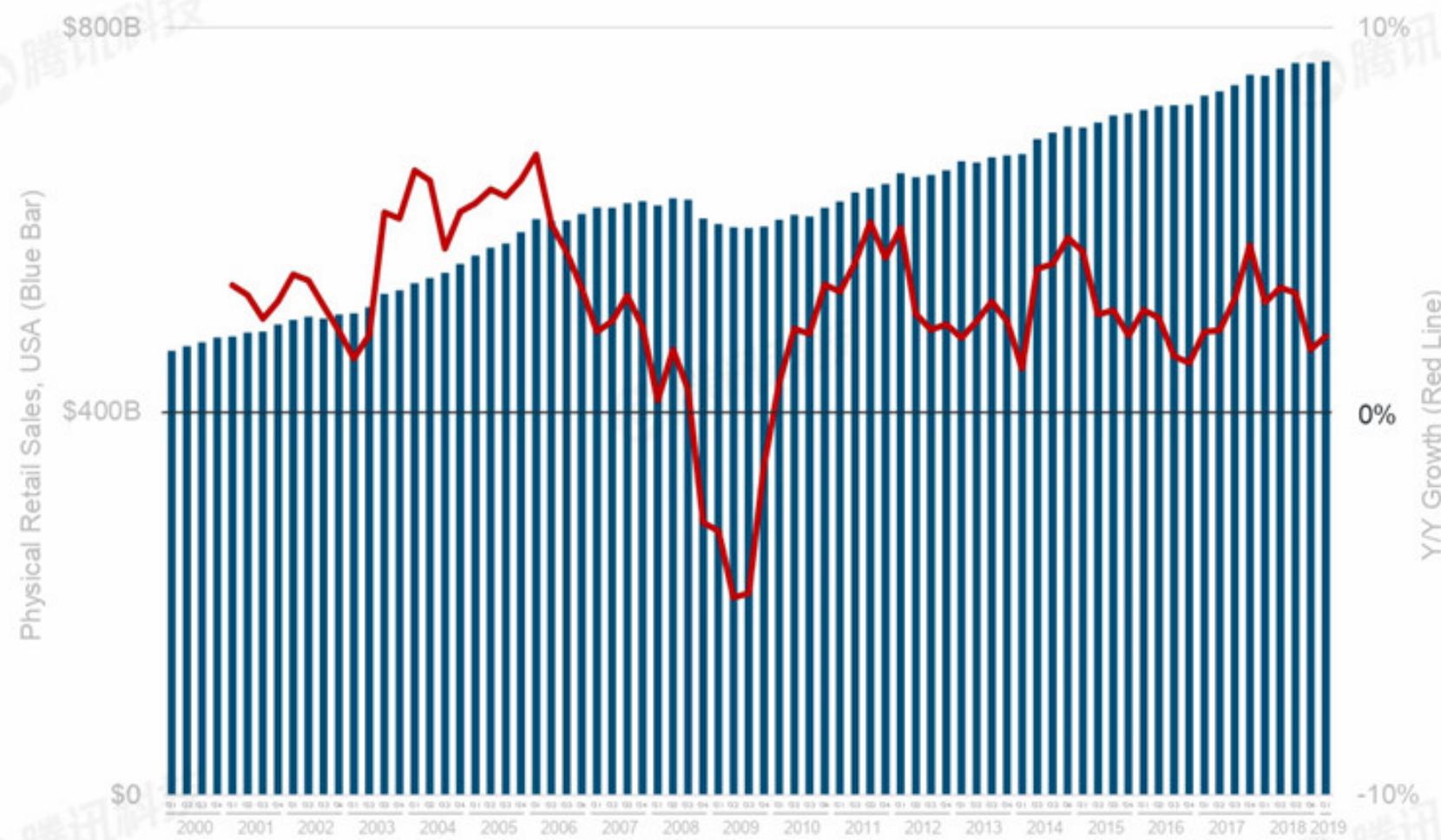


Source: St. Louis Federal Reserve FRED database. Note: Historic data (Pre-2016) adjusted / back-casted in 2017 by USA Census Bureau to better align with Annual Retail Trade + Monthly Retail Trade Survey data. Seasonally adjusted.

实体零售增长

同比稳定增长2.0%，去年Q4环比Q1增长率为1.6%

美国实体零售额与年增长率



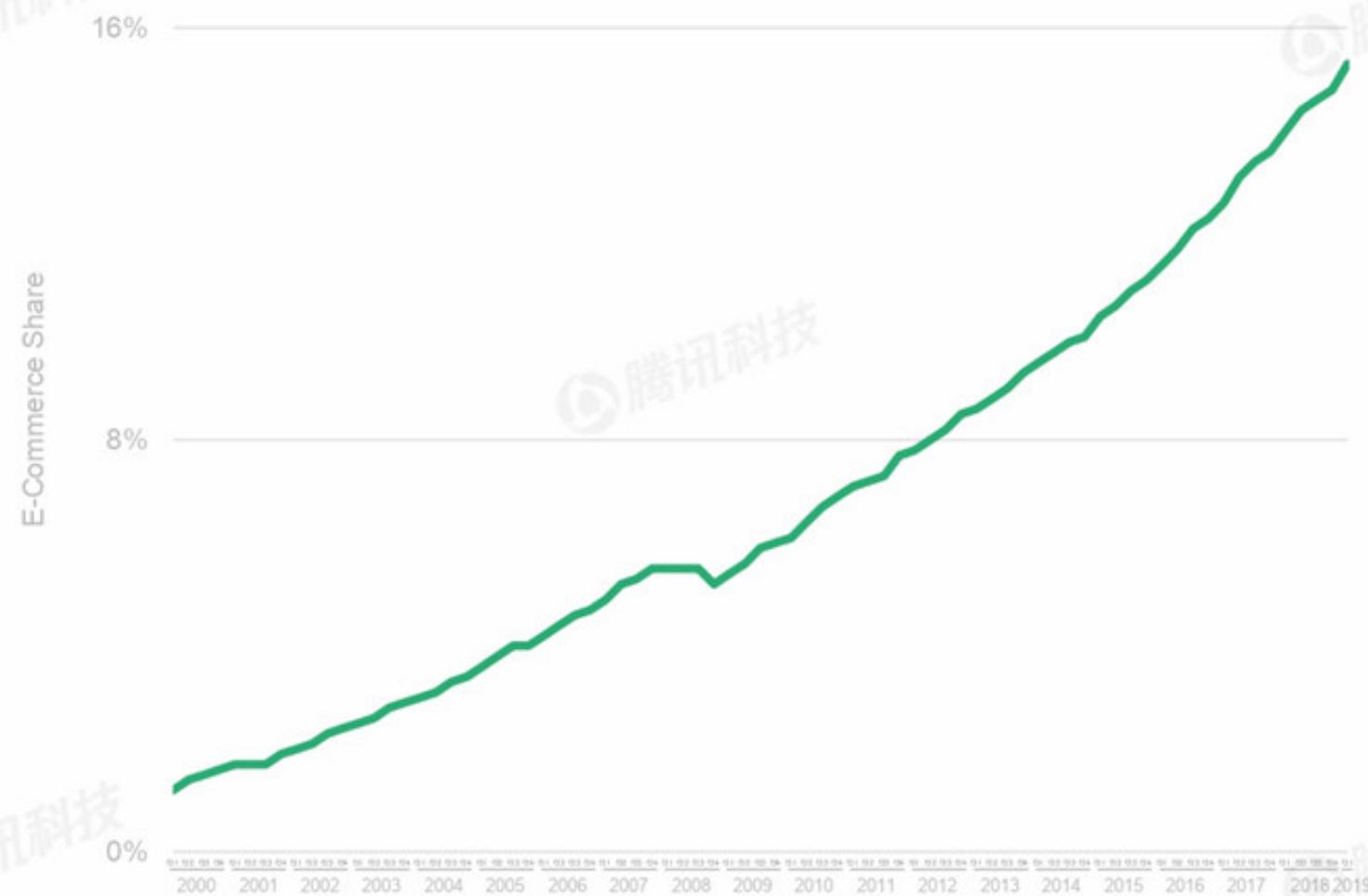
Source: St. Louis Federal Reserve FRED Database. Note: Physical Retail includes all retail sales excluding food services, motor vehicles / auto parts & fuel.

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电子商务份额

零售业务同比增长15%，2017年同期同比增长为14%

电子商务占美国零售销售额的百分比



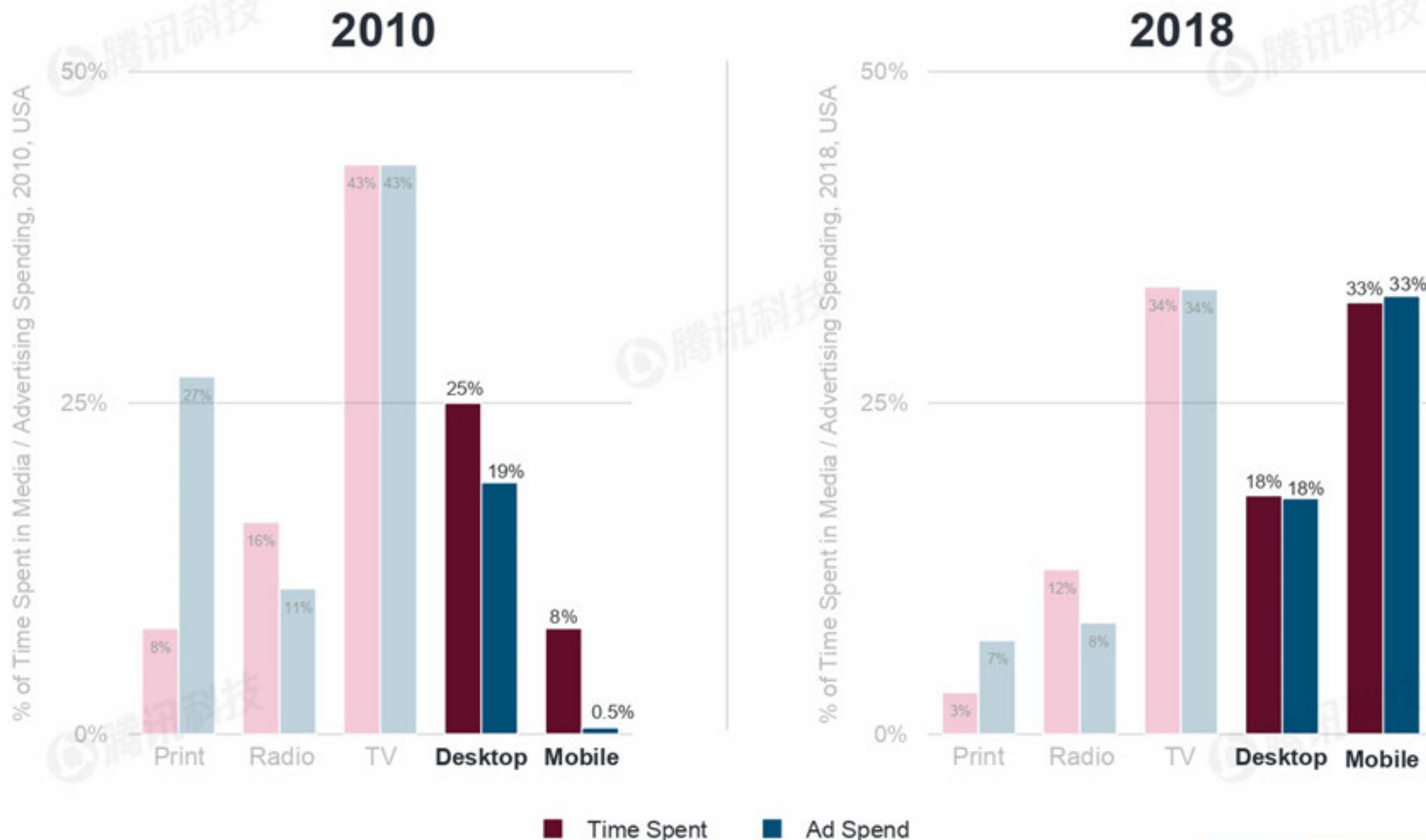
Source: USA Census Bureau, St. Louis Federal Reserve FRED database. Note: 15% = Annualized share. Penetration calculated based on E-Commerce sales by "Core" Retail Sales (excluding food services, motor vehicles / auto parts, gas stations & fuel). All figures are seasonally adjusted. Per US Census Bureau, E-Commerce is ~10% of total retail sales in Q1:19, including out-of-scope channels such as gas stations, fuel dealers, etc.

在线广告

媒体时间VS广告支出

在桌面和移动设备上两项指标达到均衡

花费在媒体上的时间百分比与广告支出的百分比



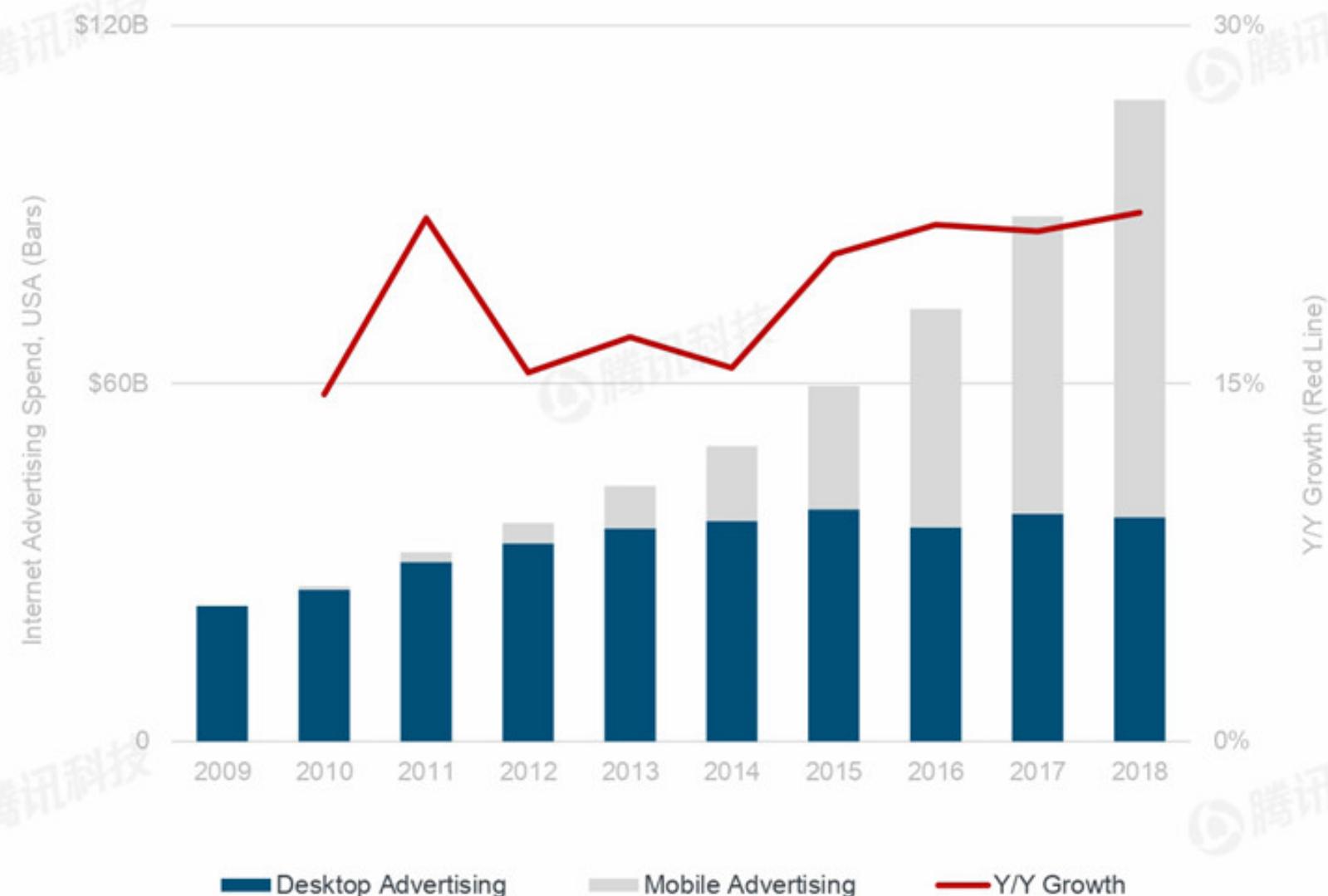
Source: Internet & Mobile advertising spend based on IAB & PwC data for full year 2018 & 2010.
Print advertising spend based on Magna Global estimates for full year 2018 & 2010. Print includes newspaper & magazine.
Time spent share data based on eMarketer (10/18). Excludes out-of-home, video game & cinema advertising.

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互联网广告支出（年度）

同比增22%，2017年同期同比增长为21%

互联网广告支出

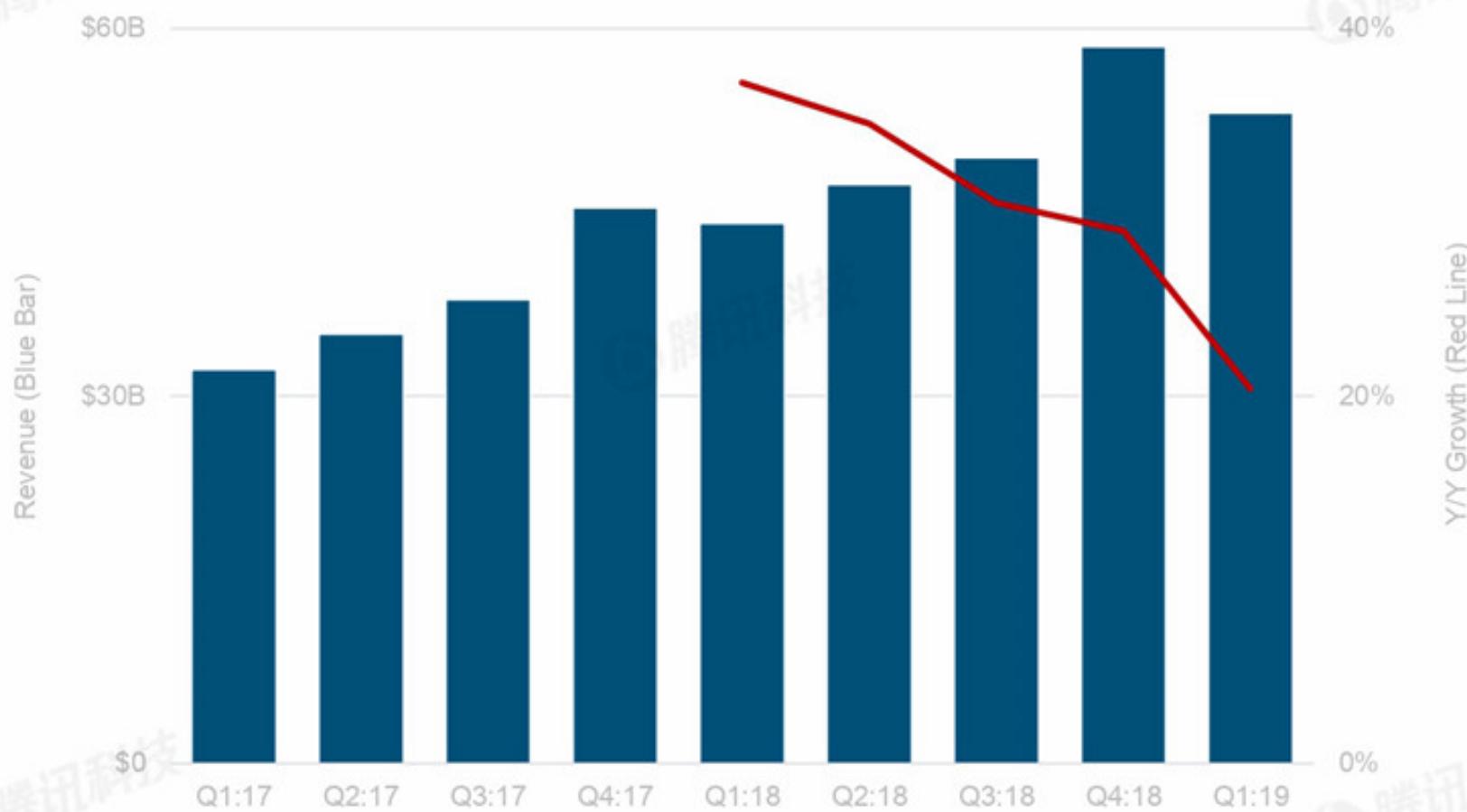


Source: IAB / PWC Internet 2018 Advertising Report (5/19).

互联网广告收入（季度）

同比增速减缓至20%，去年Q4环比Q1增长率为29%

全球领先的美国在线广告平台收入

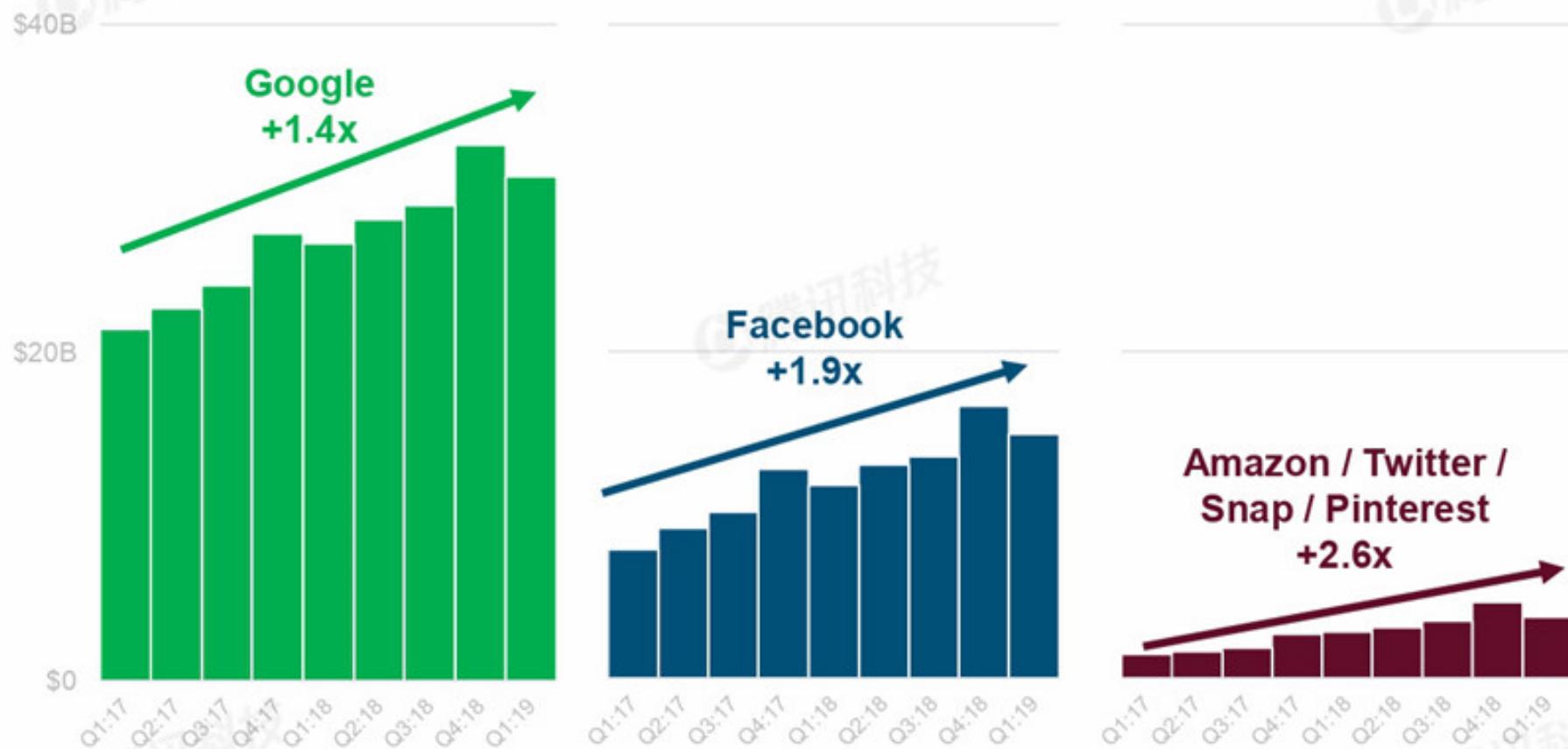


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互联网广告平台

谷歌+Facebook一马当先，但其他公司也增加了自己的市场份额

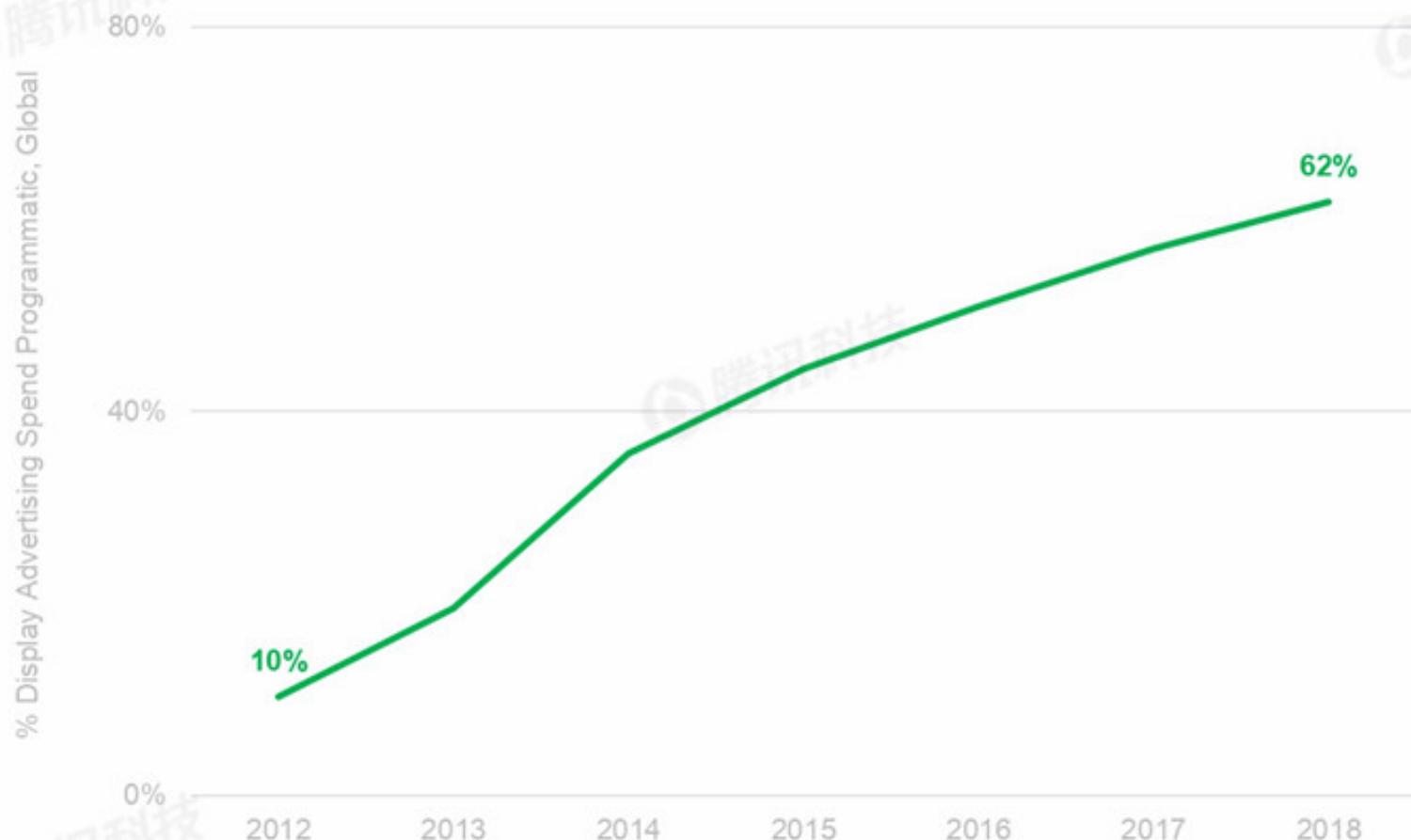
部分基于美国的广告平台营收



Source: Company public releases & Morgan Stanley estimates.

互联网广告购买: 可程序化收益vs直接购买负面影响定价

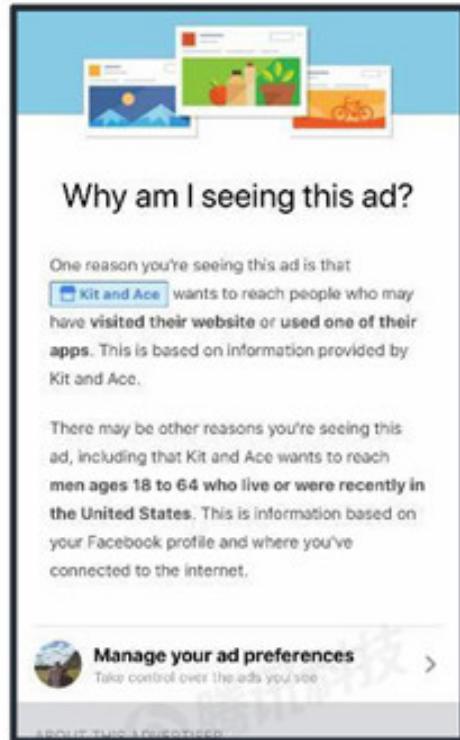
可程序化 (广告) 占全球数字显示广告百分比



广告份额增益驱动因素

更好的针对性+新创意+商务+高相关性

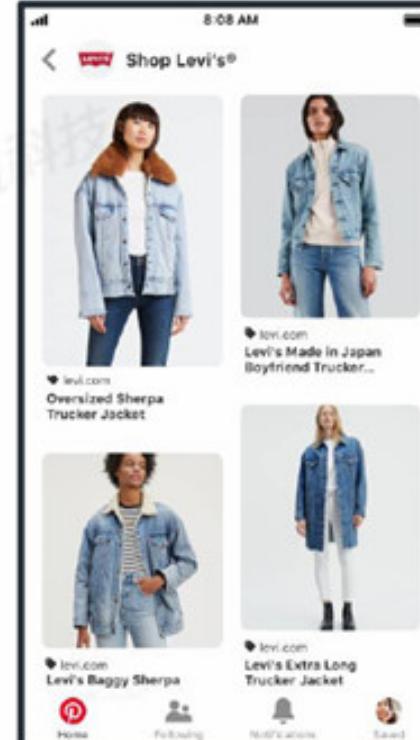
Facebook



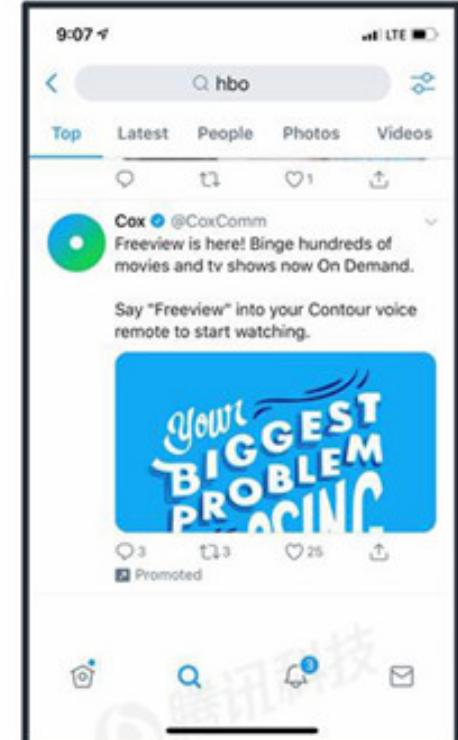
YouTube



Pinterest

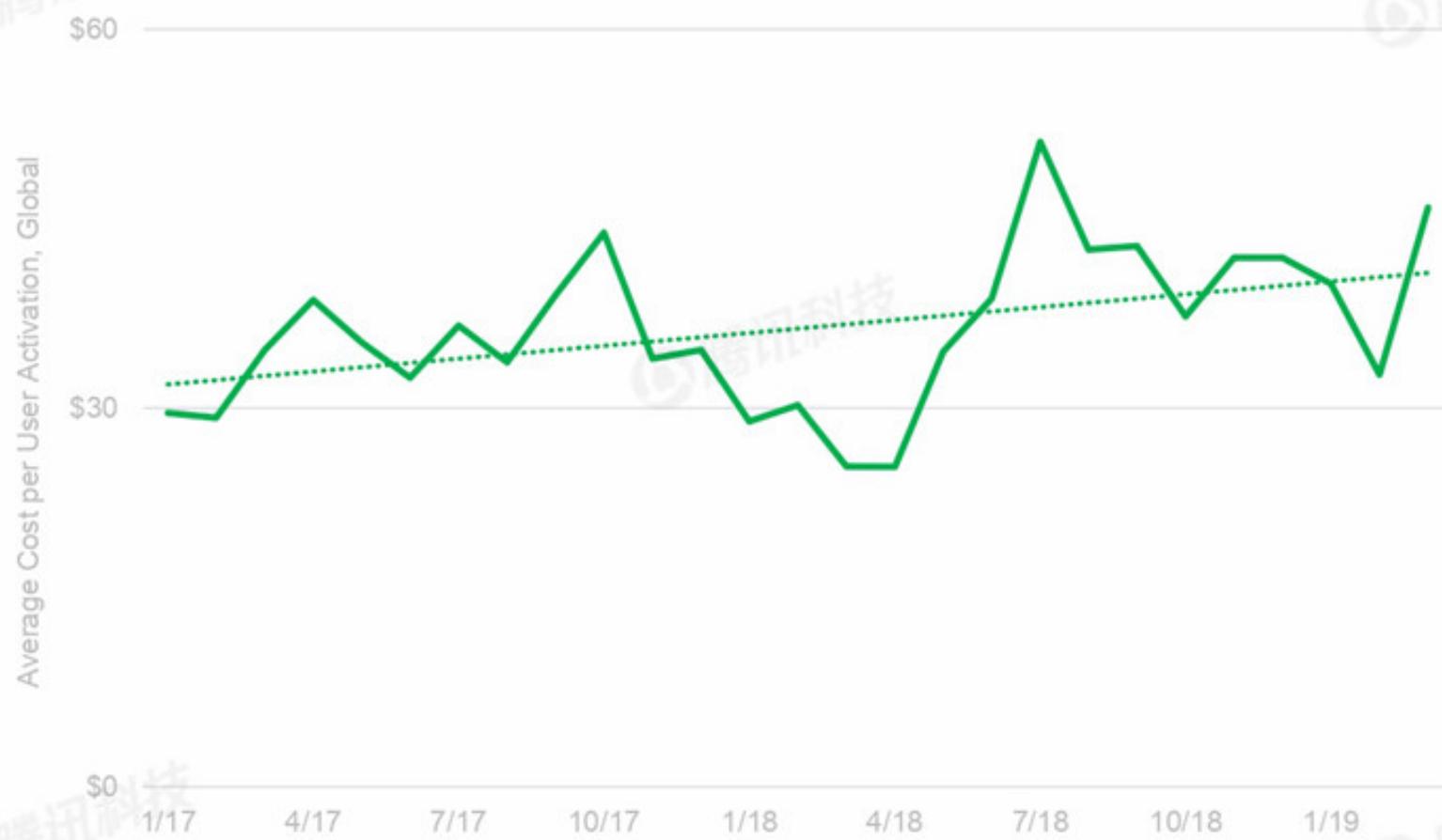


Twitter



客户获取成本 在竞争激烈/资本密集的领域上涨

每用户激活成本-移动财务应用的全球新用户获取成本

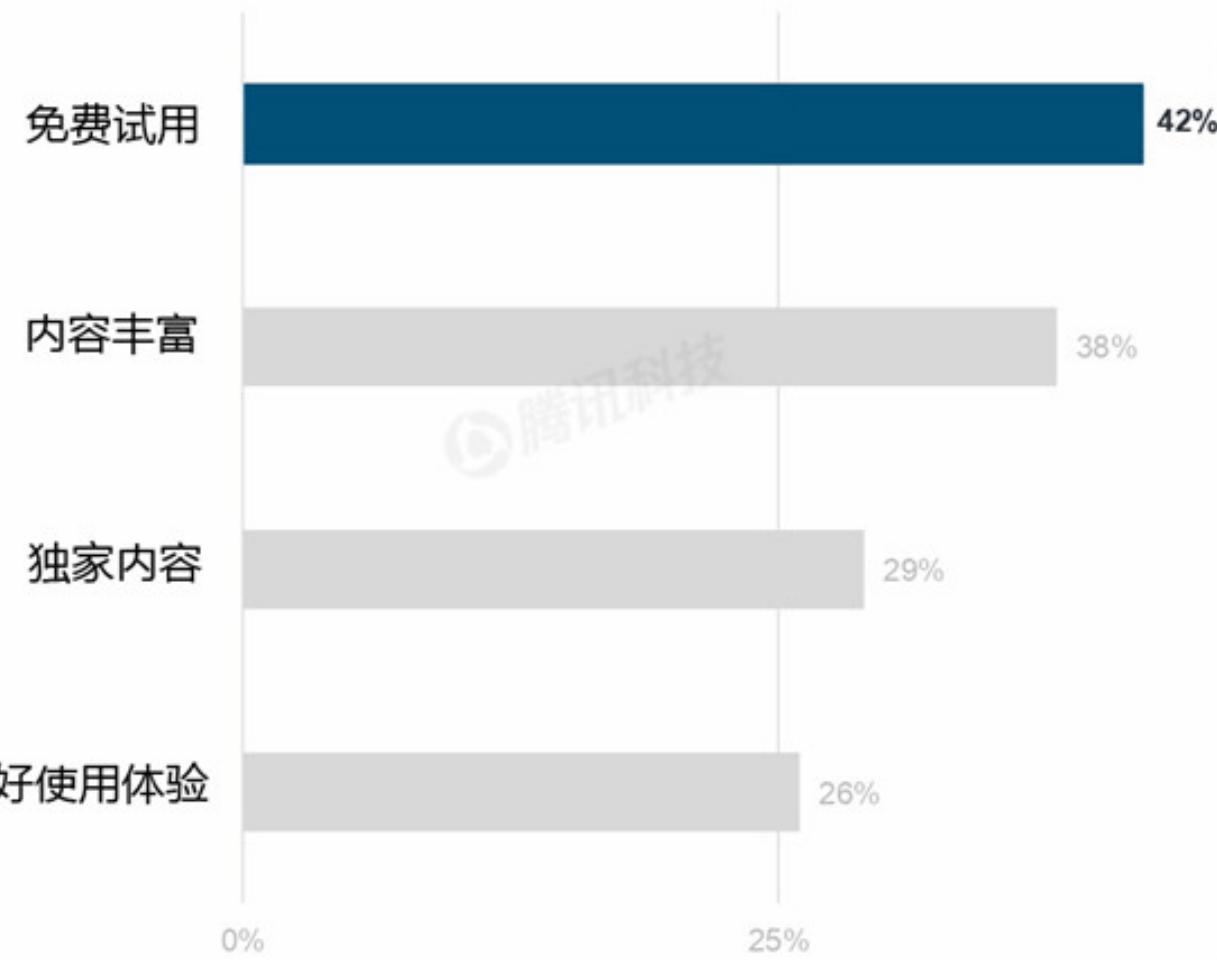


Source: Liftoff's 2019 / 2018 Mobile Finance App Report. Note: Report draws from internal Liftoff Data from 2/1/17 to 3/31/19, spanning across 5MM+ App installs, 270MM+ clicks & 3MM activations / registrations. Data focused on North America, Europe, Middle East, Africa & Asia Pacific.
Note: Activation = Adding & depositing funds to an account, activating a spending card, opening an equities position or starting a paid subscription.

现实
客户获取成本长时间超越用户终身价值将不可维系

高效+有效营销
自己的产品+快乐的客户+更多推荐机会

在线流媒体- (用户) 尝试新服务的原因

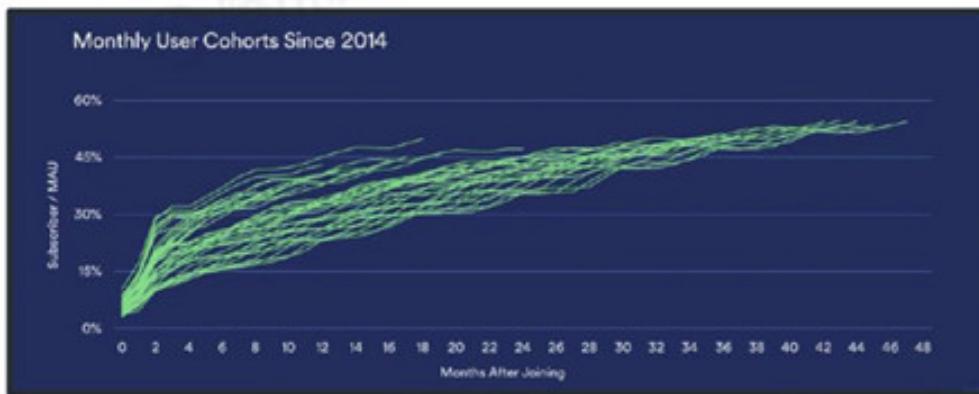


Source: 2BrightCove / YouGov survey of 10,502 adults in USA, UK, France, Australia, Germany, Canada & UAE, 9/18.

快乐的客户

Spotify: 免费用户转换为付费用户

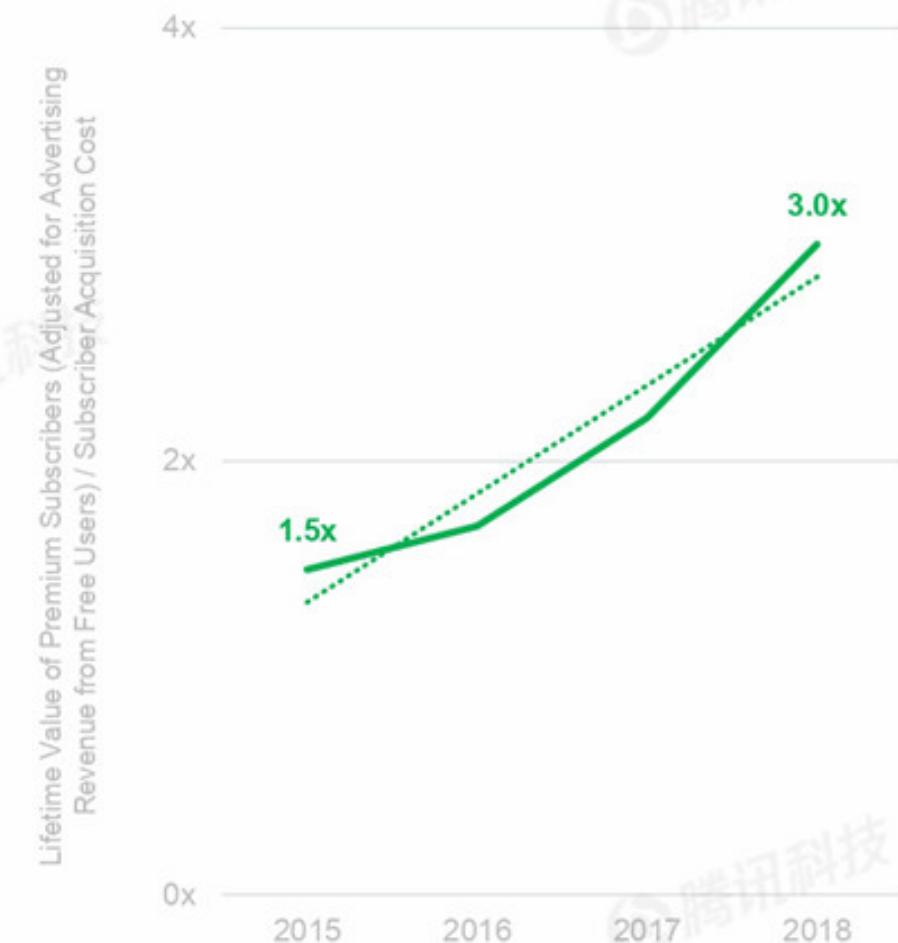
免费无广告产品



我们的免费增值模式大约为公司贡献了60%的额外付费用户
基于广告的服务是一项补贴计划，可以抵消获取新用户的成本。
开发更好的用户体验是到目前为止最有效的病毒传播效果，拥有巨大影响力。这有助于将免费用户转换为付费订阅用户。

用户终身价值/用户获取成本比不断上升

摩根士丹利的预计用户终身价值vs用户获取成本



快乐的客户

ZOOM: 免费用户转变为付费订阅用户

付费用户主持会议时，用户可以免费拨入



我们真的想让客户测试我们的产品。如果没有免费增值产品的话，

真的很难让顾客试用ZOOM。

我们使我们的免费增值产品运转出色。如果他们喜欢我们的产品，

他们很快就会愿意付费订阅。

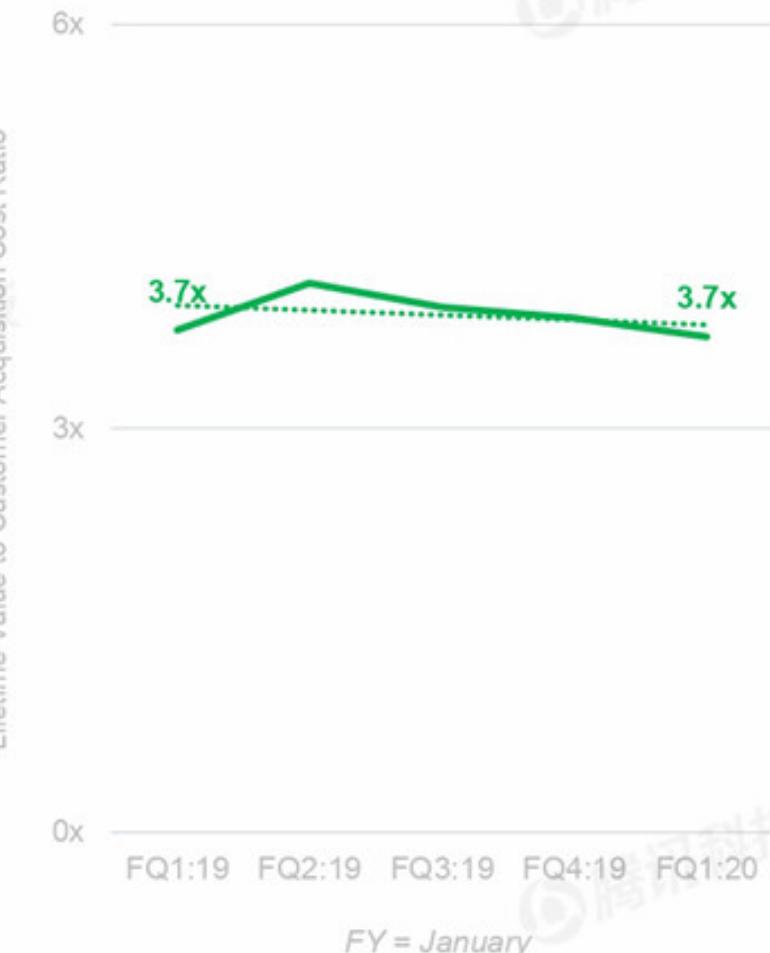
最重要的是确保顾客是快乐的，而不仅仅是追逐未来前景。我们

的用户体验指数在67-69之间，而我们的竞争对手则在20上下徘

徊。我们不想把钱花在营销方面来同其他对手拉开差距。

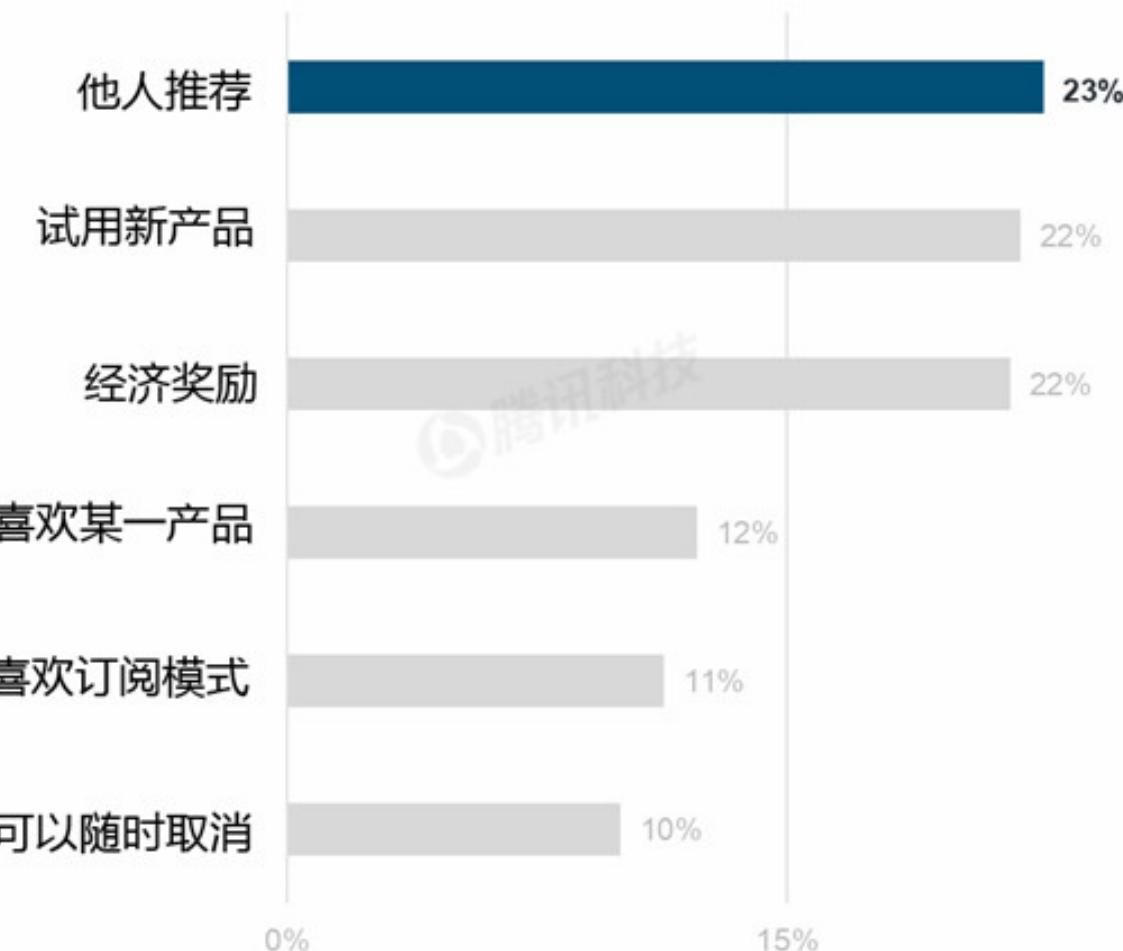
高用户终身价值/用户获取成本

高盛的预计用户终身价值vs用户获取成本



高效+有效营销=获得推荐

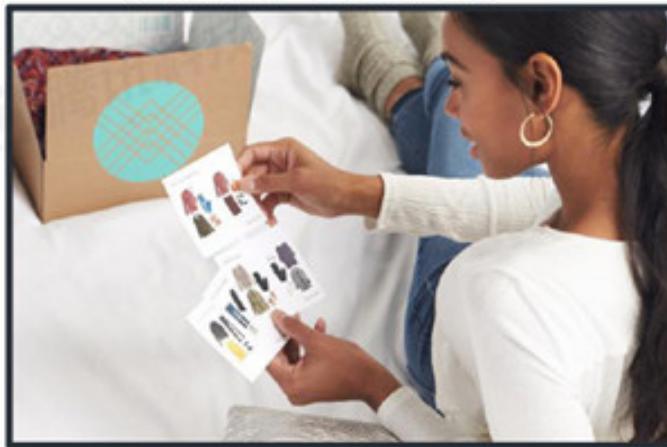
电子商务——获得新客户的方式



Source: McKinsey Research on E-Commerce Consumers (2/18). Note: Based on online survey from November 8 to 12, 2017, with from more than 5,093 participants in the United States. Of those, 4,057 (80 percent) were online shoppers, defined as people who had spent at least \$25 online in the past month. Of those, 607 (15 percent) had subscribed to at least one service over the past 12 months.

快乐的客户... STITCH FIX =获得推荐驱动增长

Data-Driven / Personalized Recommendations...
数据驱动/个性化建议



(卖衣服)的更好办法是个性化——了解产品，了解客户，然后给出非常好的推荐建议...

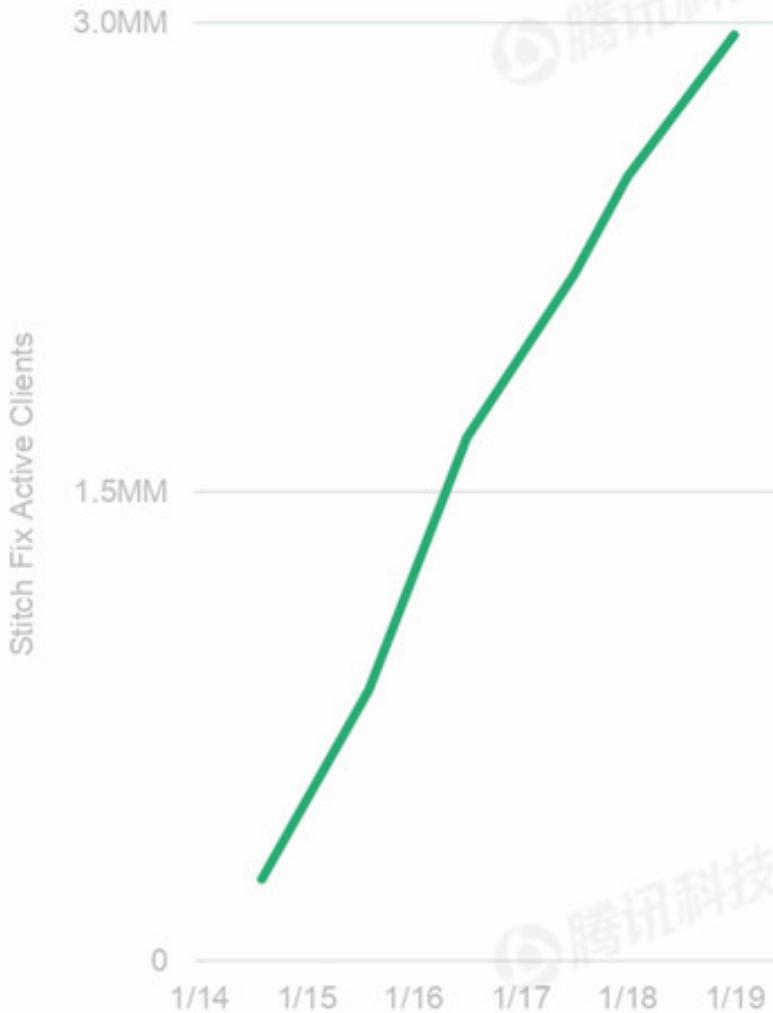
关于STITCH FIX的真正特别之处在于，我们销售的产品100%都是基于推荐的。

我们有4000多个造型师，让他们真正获得成功的关键在于倾听、执行和满足客户需求。

我们的工作就是让客户感到合适，而不一定是销售最高端、最时尚潮流的产品。

Katrina Lake – Founder / CEO, Stitch Fix, 6/18

...Stitch Fix Active Clients
STITCH FIX活跃用户



Source: Katrina Lake interview @ JPMorgan Technology, Media & Communications Conference (6/18). Stitch Fix SE
Note: Active Client refers to a client who has checked out at least 1 recommended 'Fix' in the past 12 months.

中文版制作: 腾讯科技

广告业务待办事项

Advertising TBDs

待办事项=定向广告的影响 隐私变化

隐私（担忧）是（FACEBOOK）2019年的一大问题。

这是影响我们达到全年收入预期的因素之一。

在2018年我们已经看到了GDPR《通用数据保护条例》，

这将使得监管的弧线会更长一些。

像IOS这样的平台正在进一步推进隐私努力，这将对此有潜在影响，
甚至改变我们的自身做法。

我们已选择在全球范围内推出类似GDPR的控制机制

今年晚些时候，我们将推出“清除历史”功能，
这也会影响我们展开第三方广告定位的能力。

David Wehner – CFO, Facebook, 2/19

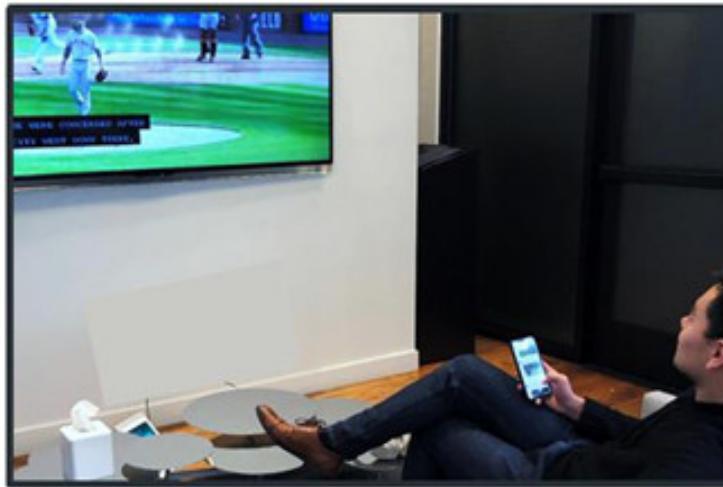
Source: David Wehner speaking at Morgan Stanley's Technology, Media, Telecom Conference, 2/26/2019.
TBD = To be Determined

中文版制作: 腾讯科技

待办事项=定向广告的影响 基于数字电视的广告（包括移动电话广告）

多平台数据提高相关性

Multi-Platform Data Improves Relevancy...



Nielsen Audience Report (USA)

88% = 在看电视时使用二台数字设备

71% = 在看电视时查找与所观看节目
相关的内容

41% = 在看电视时给朋友/家人发送
关于正在观看内容的消息

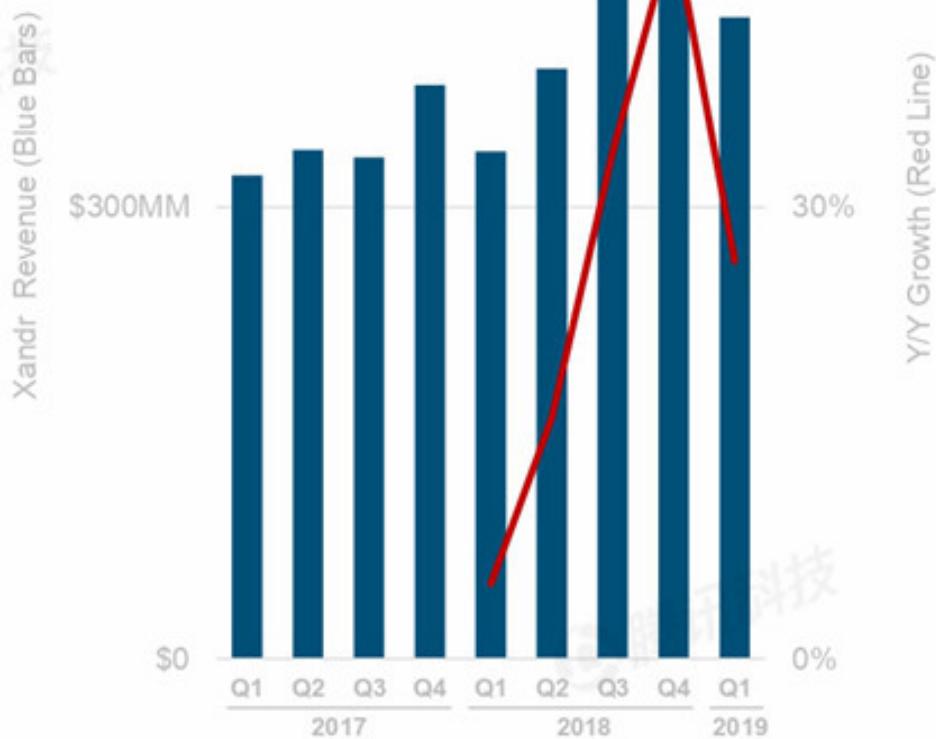
...Creating Opportunities for Better Ad Experiences
为更好的广告体验创造机会

Xandr Revenue vs. Growth Y/Y

\$600MM 60%

\$300MM 30%

\$0 0%



Source: AT&T / Xandr Releases. Nielsen Q2:18 Total Audience Report (12/18). Note: Survey based on Nielsen National Panel data. Note: 2018 USA Mid-term elections drove above-average television advertising spend on Xandr platform.

中文版制作: 腾讯科技

**INTERNET USAGE =
SOLID GROWTH...
DRIVEN BY INVESTMENT + INNOVATION**

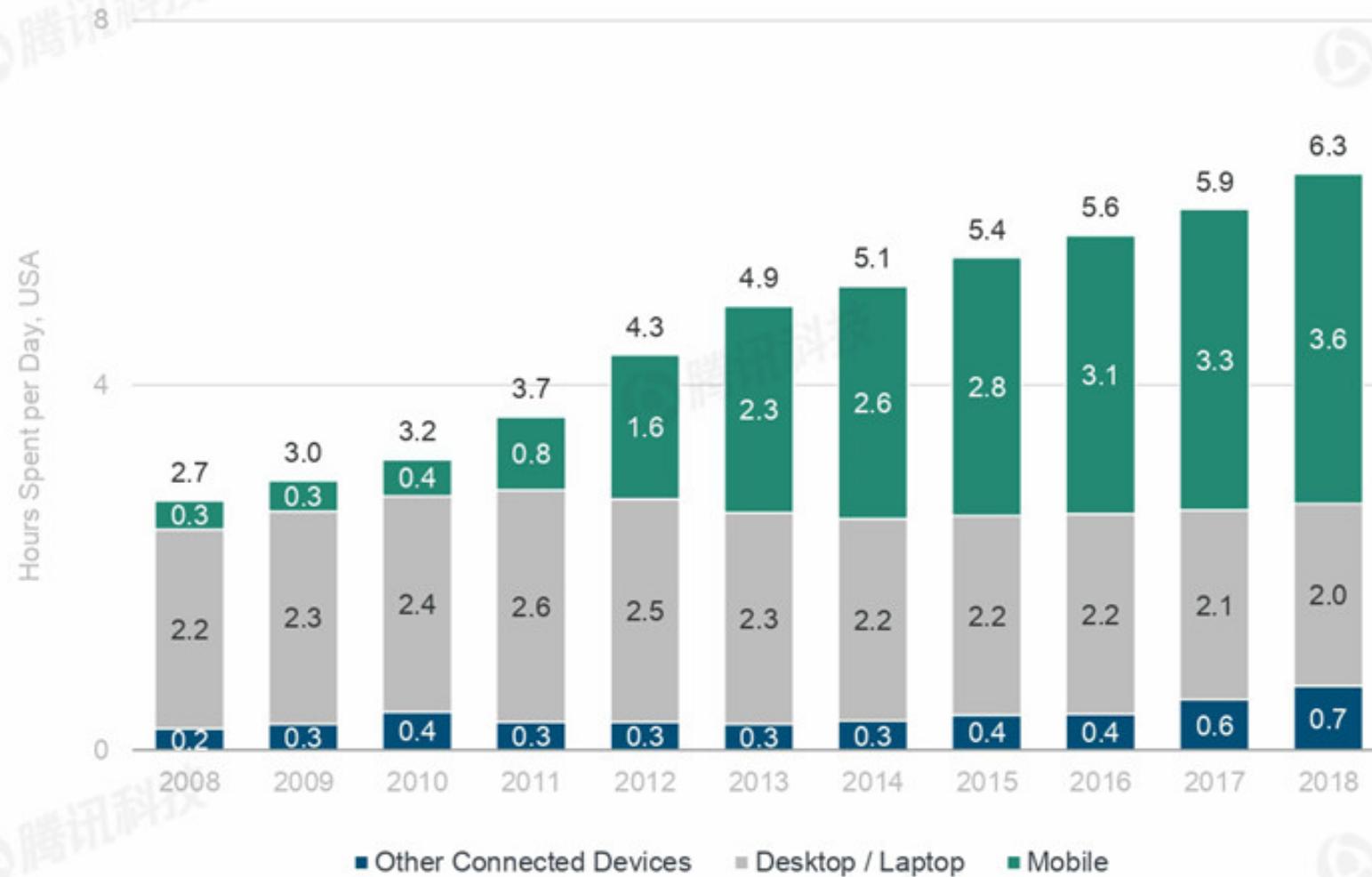
互联网使用率=
**稳定增长...
投资+创新驱动**

Usage

使用率

数字媒体使用率： 同比增长7%，2017年同期同比增长5%

Daily Hours Spent with Digital Media per Adult User, USA 美国每位成人用户每天花在数字媒体上的时间



Source: eMarketer 9/14 (2008-2010), eMarketer 4/15 (2011-2013), eMarketer 4/17 (2014-2015), eMarketer 10/12 (2016-2018)
Note: Other connected devices include OTT & game consoles. Mobile includes smartphone & tablet. Usage includes both home & work for consumers 18+. Non-duplicated defined as time spent with each medium individually, regardless of multitasking.

Usage Drivers

使用率驱动因素

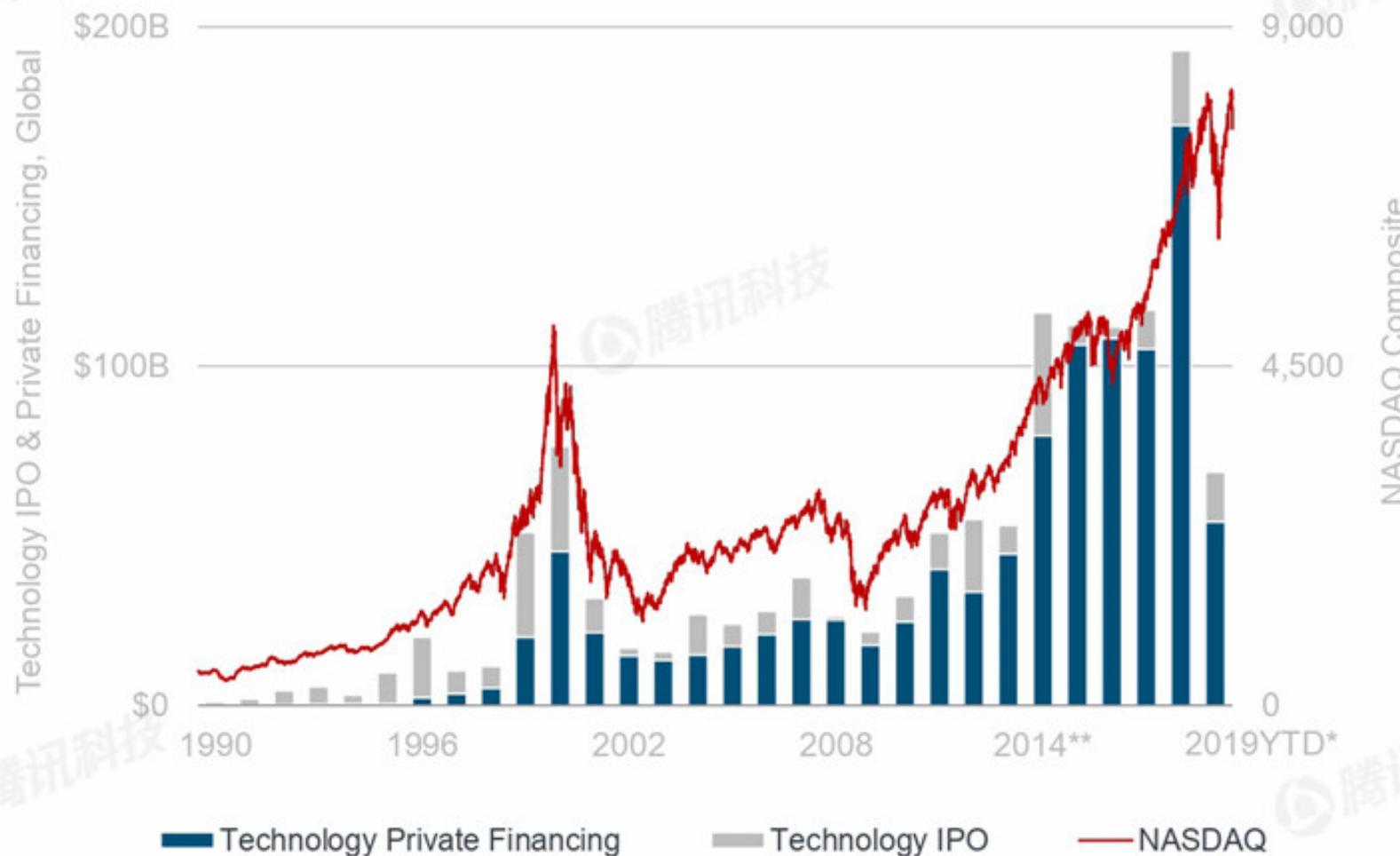
Global Internet / Technology Businesses =

Investment Remains Robust

全球互联网/技术业务=
投资保持稳健

对（上市、私营）技术公司的投资： 创下20年来新高

在美国上市的科技公司IPO& 全球技术风险投资融资额



Source: Morgan Stanley Equity Capital Markets, *2019YTD figure as of 6/7/19, Thomson ONE. All global USA-listed technology companies over \$30MM, data per Dealogic, Bloomberg, & CapitalIQ. 2012: Facebook (\$16B IPO) = 75% of 2012 IPO \$ value. 2014: Alibaba (\$25B IPO) = 69% of 2014 IPO \$ value. 2017: Snap (\$4B IPO) = 34% of 2017 \$ value. 2019: Uber (\$8B IPO) = 56% of 2019YTD \$ value.

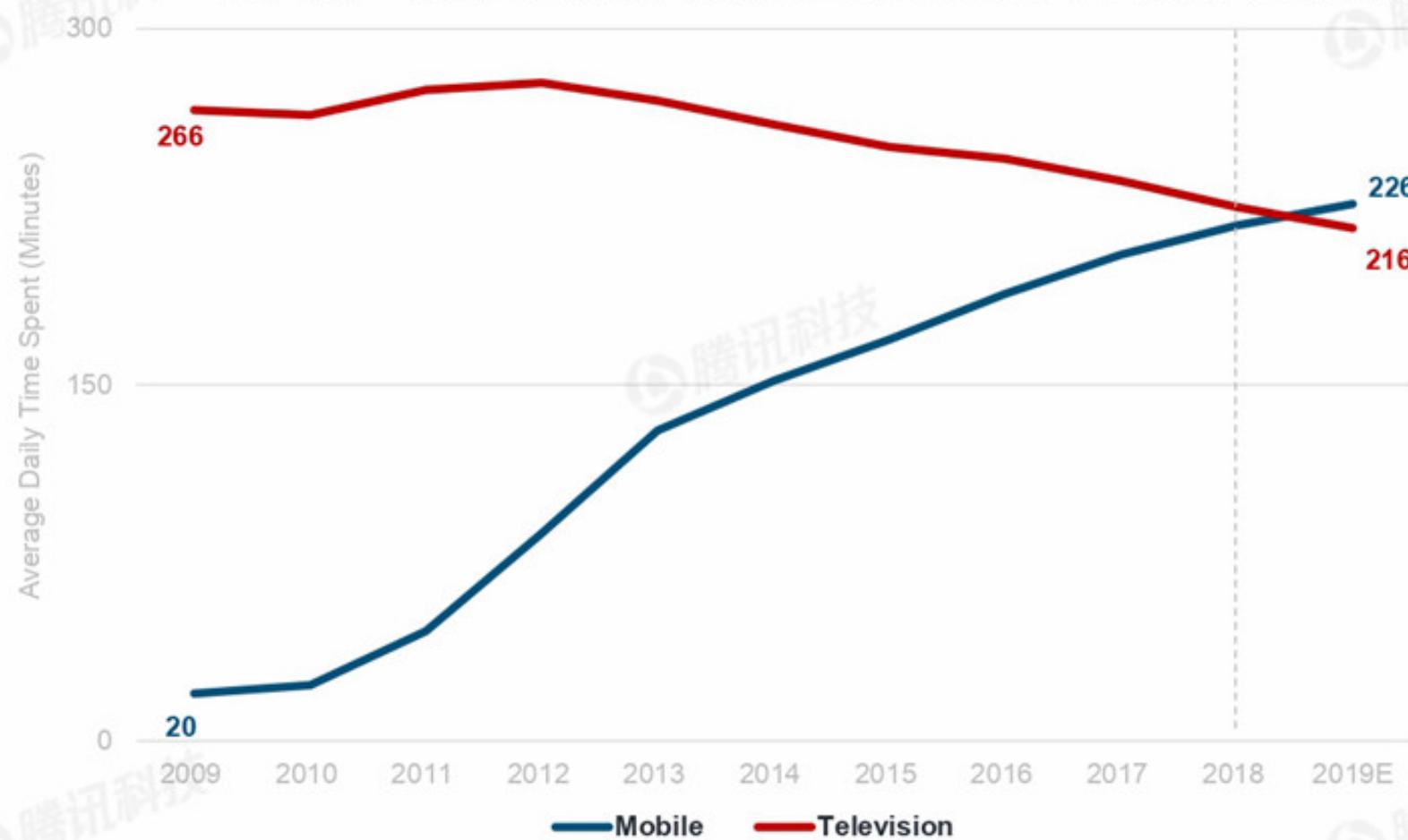
中文版制作: 腾讯科技

*Internet / Technology Businesses =
USA-Based
Innovation Remains Robust...*

**互联网/技术业务：
美国创新继续繁荣**

设备使用时间= 移动>电视

Television & Mobile Daily Time Spent (Non-Deduped), USA
美国用户每天在电视和移动设备上花费的时间 (未删除重复数据)



Source: eMarketer (10/18). Usage includes both home & work for consumers 18+.

Non-deduped defined as time spent with each medium individually, regardless of multitasking. Updated from original 4/18 release in 10/18 by eMarketer

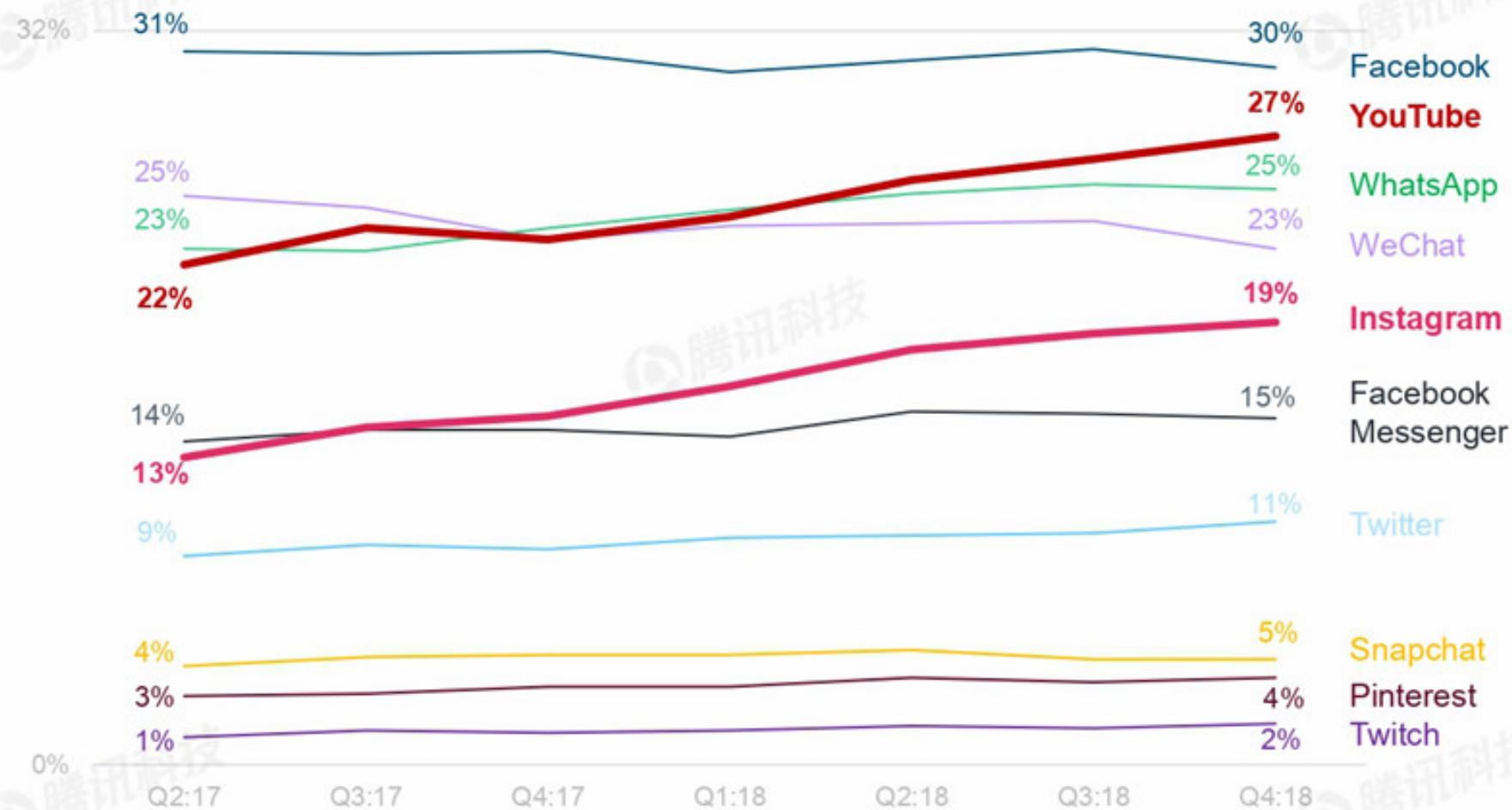
中文版制作: 腾讯科技

平台在线时长=

YOUTUBE + INSTAGRAM增长迅速

% Internet Users Using Select Platforms > 1x per Day, Global*

全球范围内使用特定平台的互联网用户占比情况

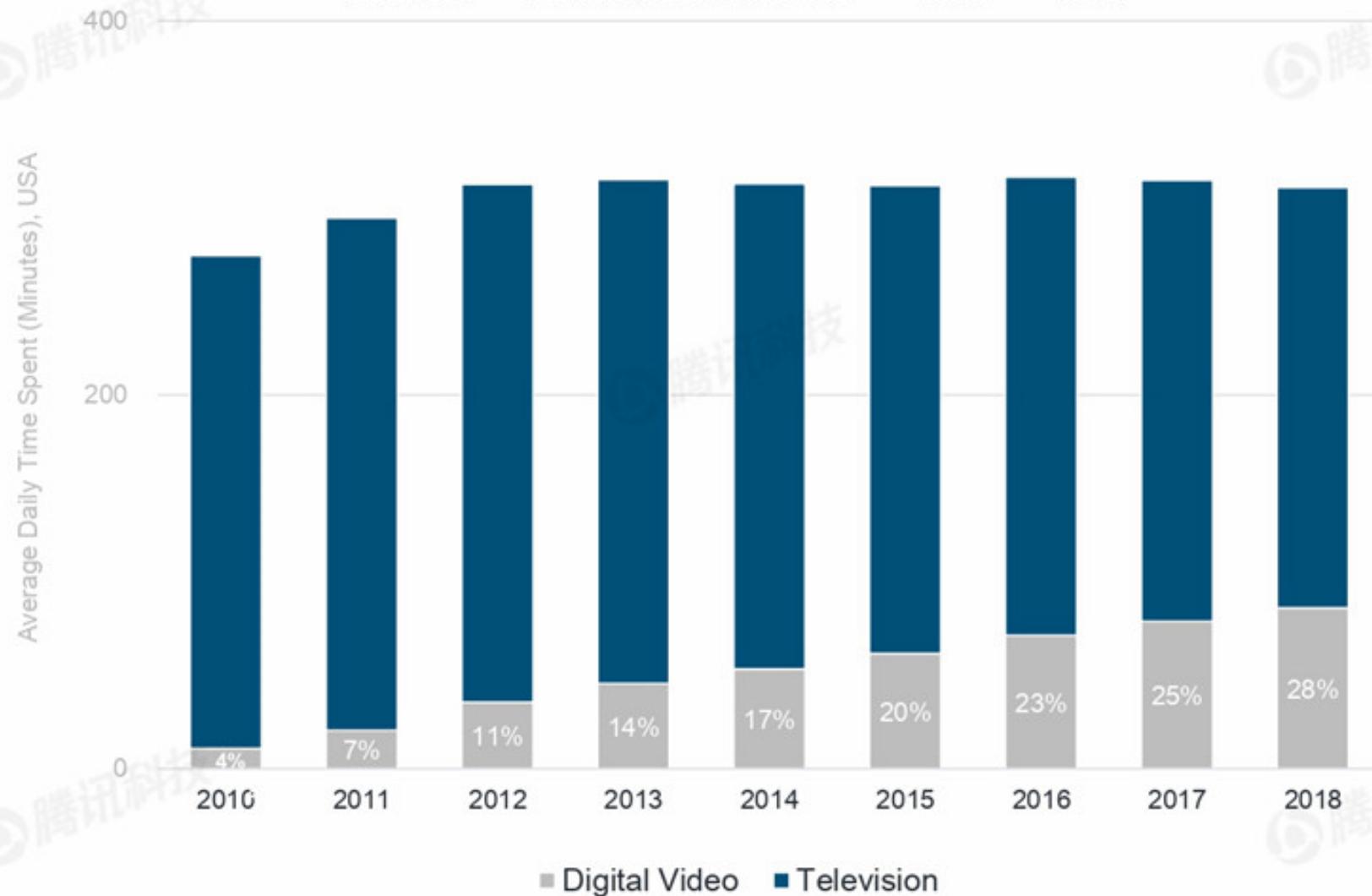


视频观看时长=

数字内容观看时长在五年内增长一倍，总占比为28%

Video Watching Daily Minutes – Digital vs. TV, USA

美国用户每日视频观看分钟数——数字VS电视

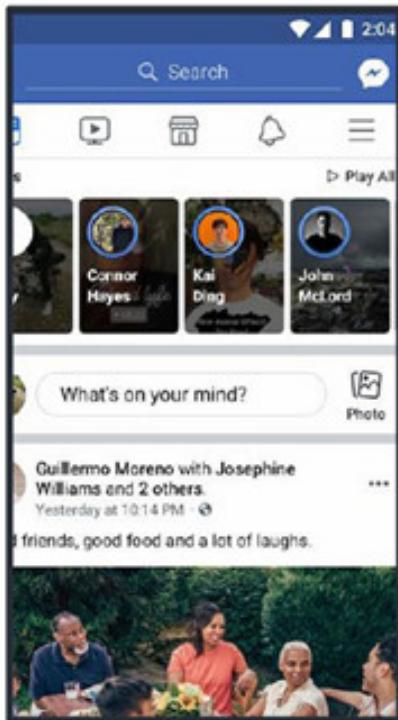


Source: eMarketer (10/18). Usage includes both home & work for consumers 18+. Non de-duplicated defined as time spent with each medium across all devices.

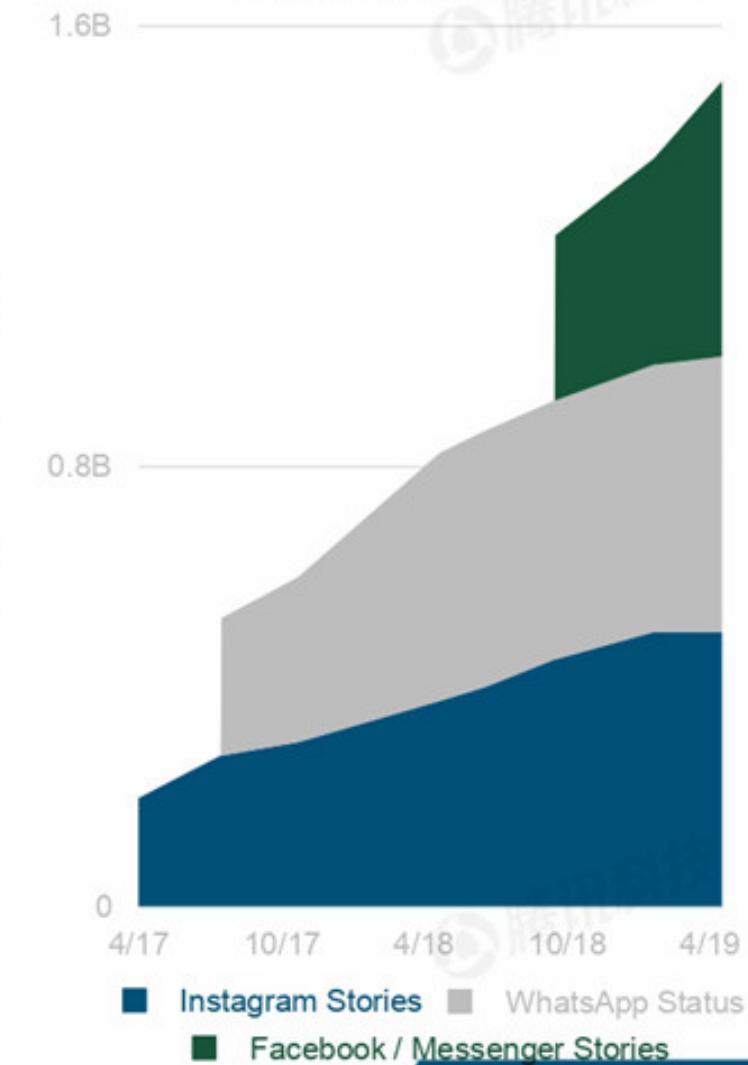
中文版制作: 腾讯科技

视频时长（短视频—FACEBOOK平台）= 15亿日活跃用户，一年内增长一倍

Facebook Stories



Daily Active Users, Global*
全球日活跃用户



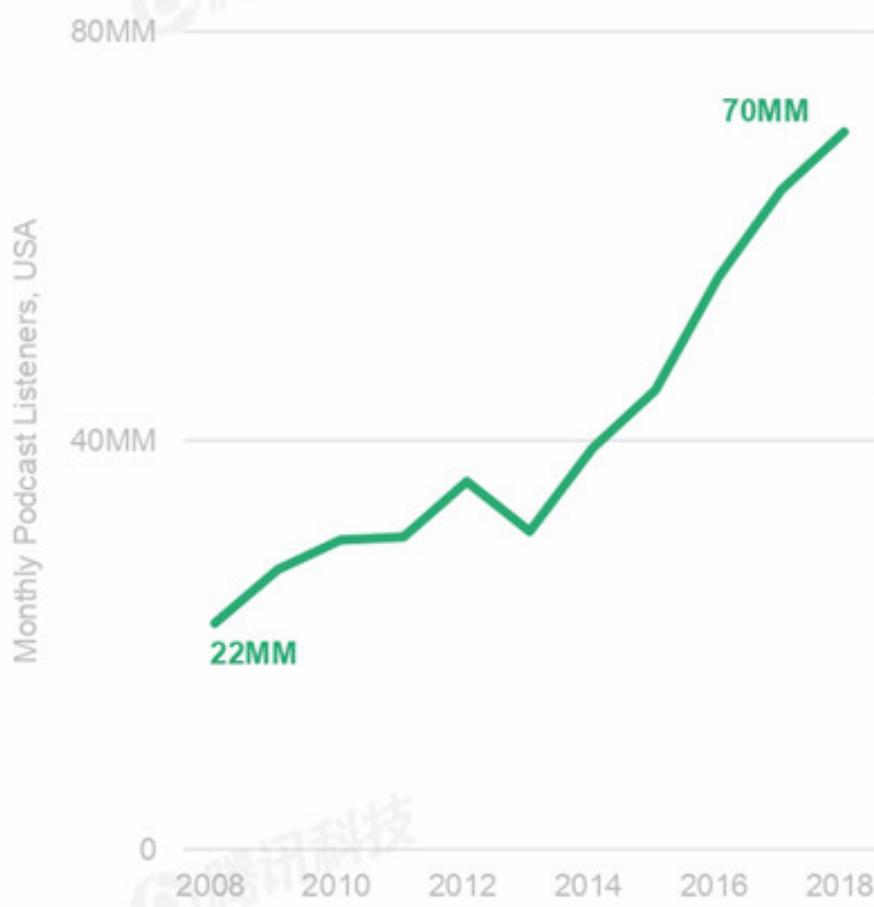
Source: Facebook (8/18, 12/18). Daily Active Users (DAU) = Users that interact with a Story daily.
Vertical segments of chart = owing to first reported DAU metric for each product. *Not de-duped across platforms.

中文版制作: 腾讯科技

语音

7000万播客月活跃听众，四年增长约两倍

播客月活跃听众(美国)

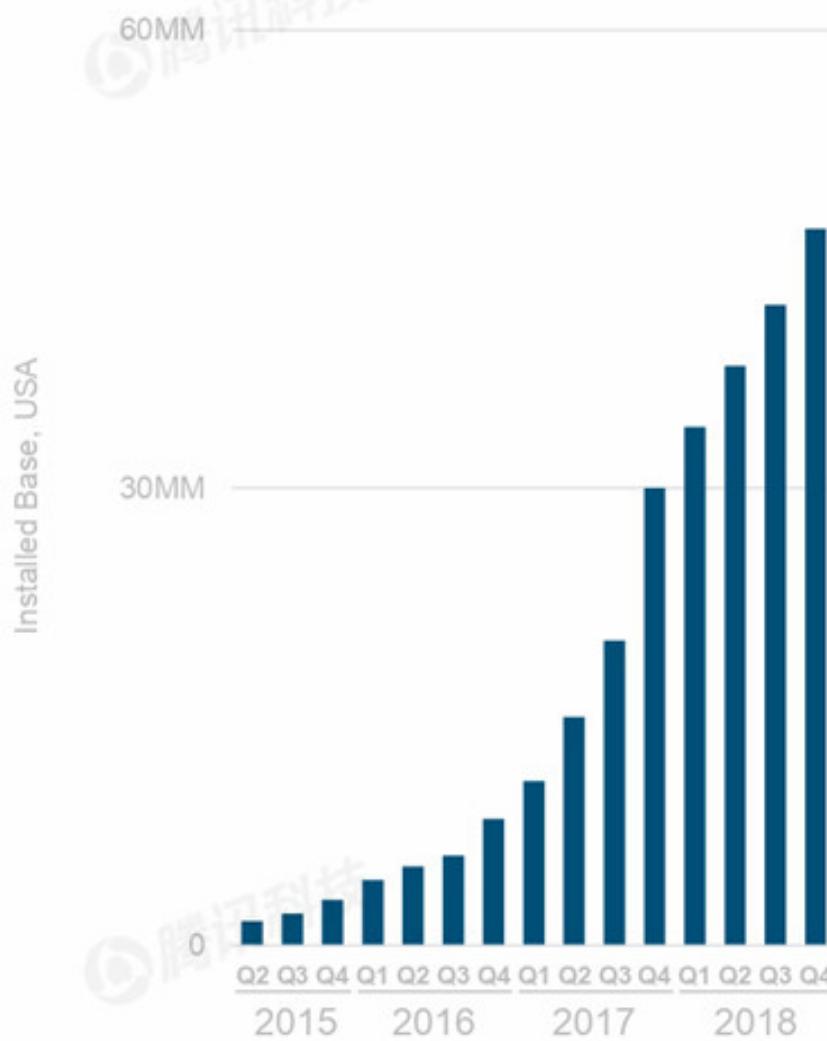


2018年美国下载量最大的苹果播客

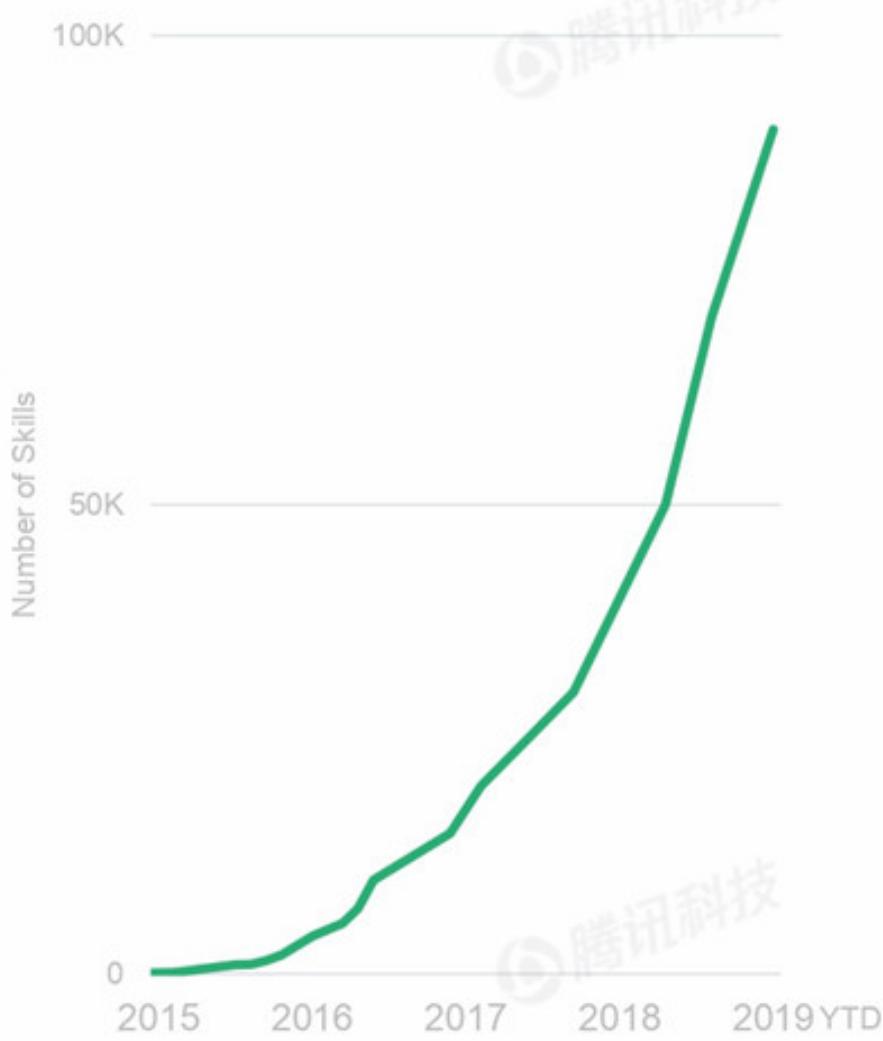
- 1) **The Daily** *The New York Times*
- 2) **The Joe Rogan Experience** Joe Rogan
- 3) **Stuff You Should Know** iHeartMedia
- 4) **Fresh Air** National Public Radio
- 5) **The Dave Ramsey Show** Dave Ramsey
- 6) **My Favorite Murder** Exactly Right
- 7) **TED Talks Daily** TED
- 8) **Up First** National Public Radio
- 9) **The Ben Shapiro Show** The Daily Wire
- 10) **Pod Save America** Crooked Media

4700万亚马逊Echo装机量，一年增长约两倍

亚马逊Echo装机量



亚马逊Echo技能

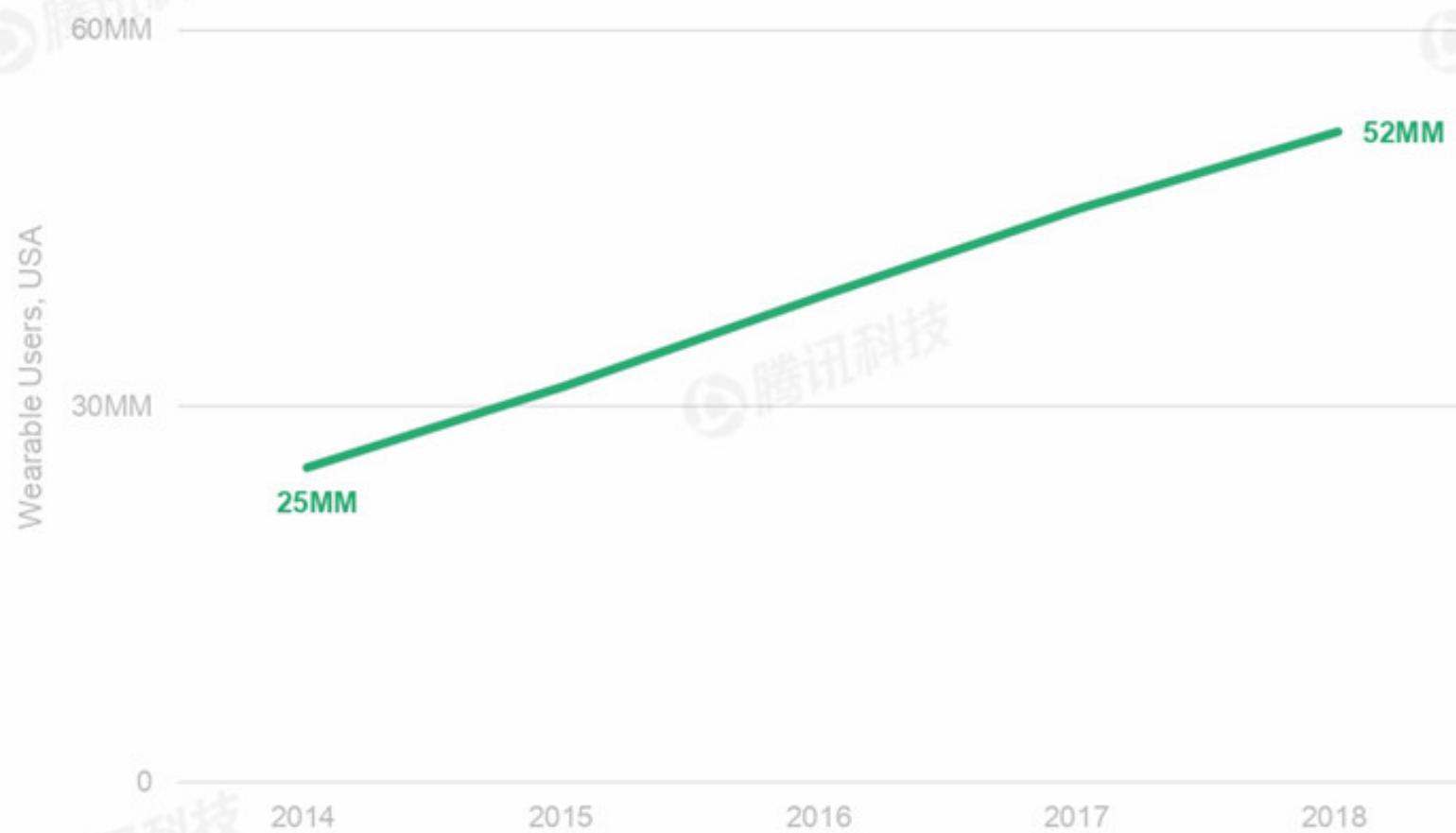


Source: Consumer Intelligence Research Partners LLC (Echo install base, 2/18), Various media outlets including Geekwire, TechCrunch, & Wired (Echo skills, 4/19)

可穿戴设备

5200万用户，四年增长约两倍

美国可穿戴设备用户



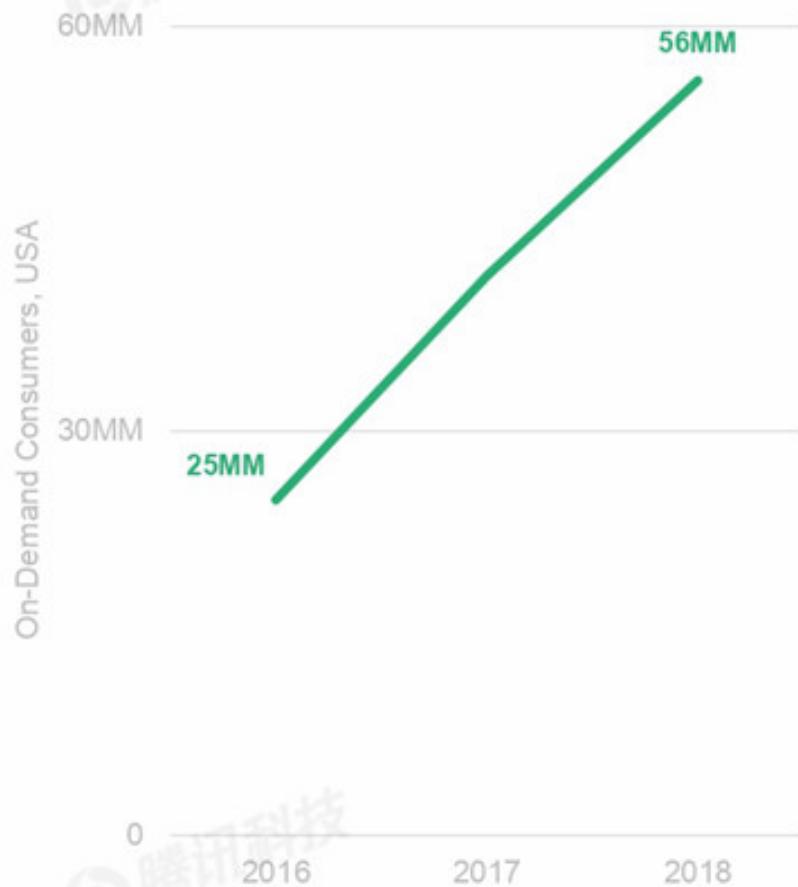
Source: eMarketer (11/18). Users = Monthly Active adults 18+ years old who wear accessories or clothing with electronics, software, or sensors that have the ability to connect to the Internet (via built-in connectivity or tethering), which in turn collects & exchanges data with a manufacturer, operator, or other connected devices.

中文版制作: 腾讯科技

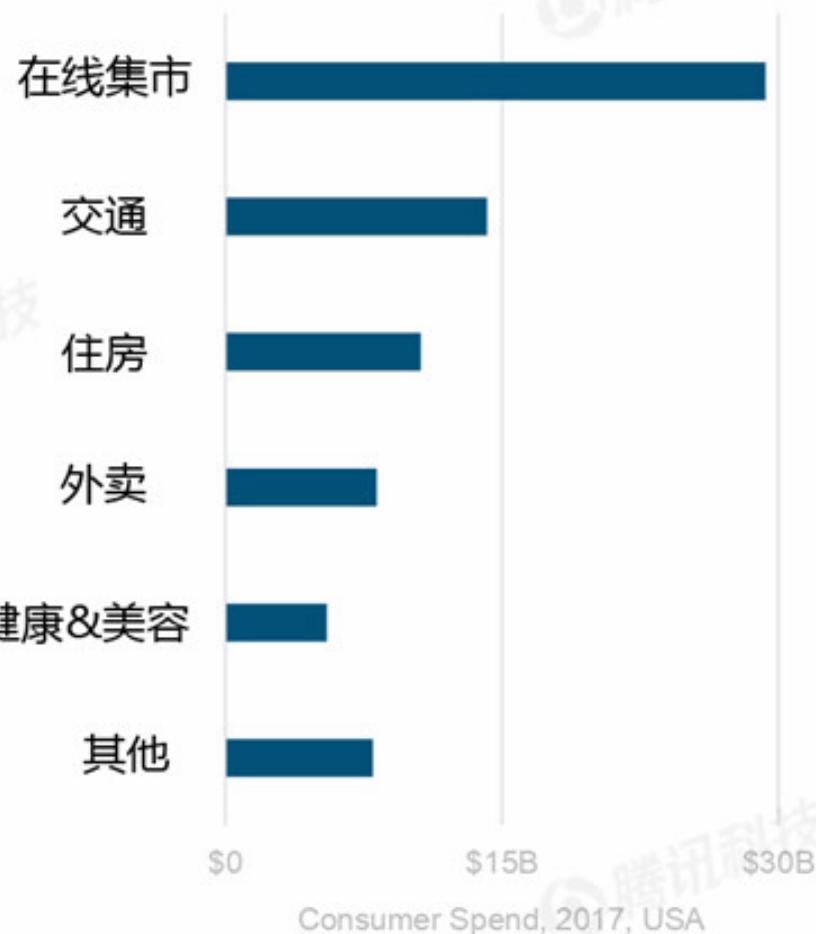
应需

5600万消费者，两年增长约两倍

美国应需消费者



应需产品/服务 美国2017年消费者开支

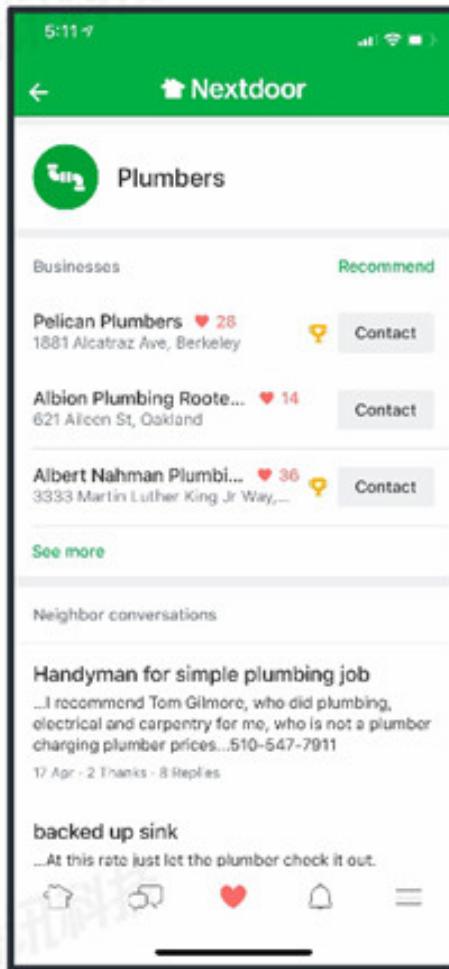


本地化

23. 6万Nextdoor活跃社区，两年增长约两倍

本地企业推荐

2900万，同比增长71%



全球活跃社区

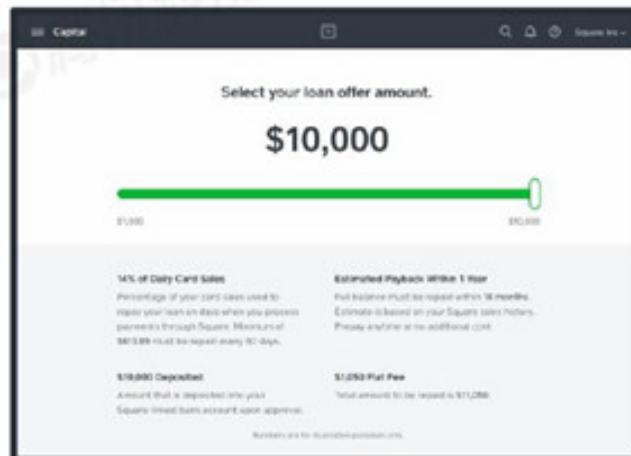


Source: Nextdoor (5/19). 29MM = Cumulative local business recommendations on the platform, up 71% Y/Y vs. 17MM in 5/18.

中文版制作: 腾讯科技

未获充分服务的人口：Square卖家增长 美国收入最低的都市统计区域（MSA）比收入最高的快28个百分点

Square资本数据



45亿美元：贷款（2014年-2019年第一季度）

58%：女性拥有的企业

35%：少数族裔拥有的企业

6000美元：平均贷款规模

（约为小企业政府贷款平均额的1/18）

Square活跃买家数量增长



Source: Square (5/19). * Per Federal Reserve's "Survey of Terms of Business Lending", Aug 2017. Note: MSA = Metropolitan Statistical Area. Active Square Sellers are defined as those who have accepted five or more payments within the last 12 months. Square Capital Loans only available to Active Square Sellers. Data sourced from the Bureau of Economic Analysis's 2017 report on "Annual Personal Income by Metropolitan Statistical Areas". From 2014-2018, the adoption growth rate of the bottom 25 MSAs was on average 1.22x that of the top, demonstrating the utility & relevance of payment technology in less traditional areas.

互联网/科技企业

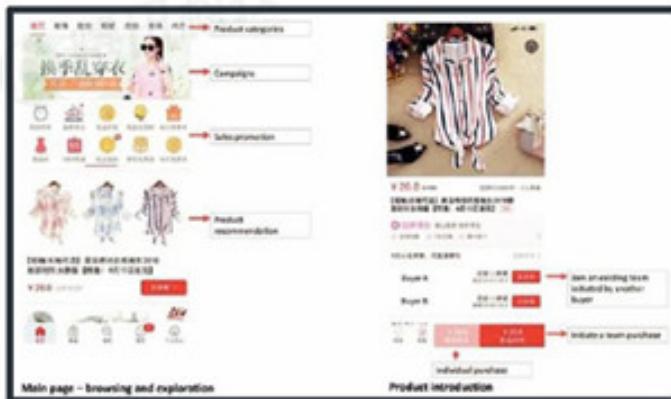
美国以外的创新依然强劲

数据驱动/直接
履行
增长迅速

中国（拼多多）：把消费者偏好与厂商连接起来

4.43亿买家，五个季度增长约两倍

拼团购物



我们称之为“消费者-厂商”，在这种模式下，我们首先理解消费者需求，

然后促进农民、制造商等上游供应商为我们的用户生产合适的产品。

这有别于目前的系统模式。在当前系统下，上游厂商的设计、生产和销售

过程未必能够匹配其目标用户不断变化的需求。

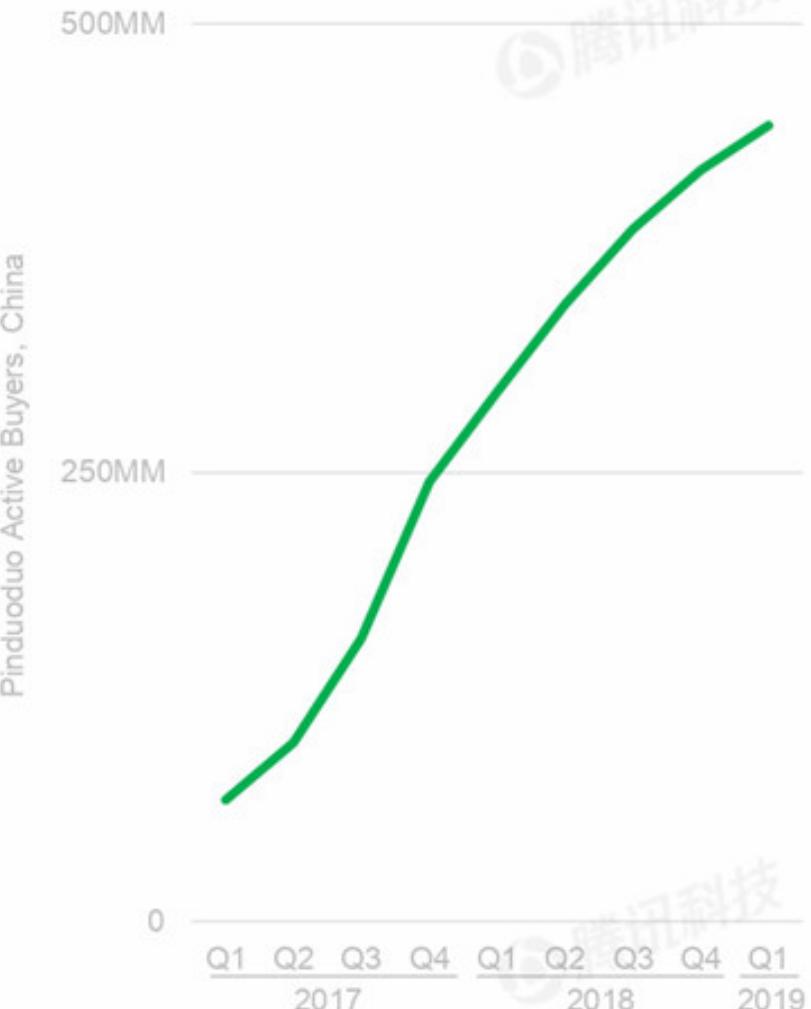
随着我们吸引更多用户加入网络，并且通过他们与我们平台逐步增加的

互动获取更多数据点，我们可以进一步提炼自己的引擎，以便提供更好

的用户体验，与我们用户不断变化的偏好匹配。

拼多多

中国活跃买家



Source: Pinduoduo SEC filings (2018), Q4:18 Earnings Call (3/19) & Morgan Stanley.
Note: An active buyer is a buyer who has completed at least one transaction in the past 12 months.

中文版制作: 腾讯科技

中国（美团点评）：把消费者与本地企业连接起来 约600万商家，两年增长约两倍

美团点评 履行



中国本地商家以小微企业为主，它们以往可用的营销渠道很少。我们已经成为本地搜索和消费服务发现的必备平台。

根据我们的数据分析，我们利用用户的搜索请求，把他们与能够匹配其偏好的高质量的本地商家连接起来。我们可以帮助商家用很低的前期成本接触庞大的潜在消费者，并提供极高的转化率。

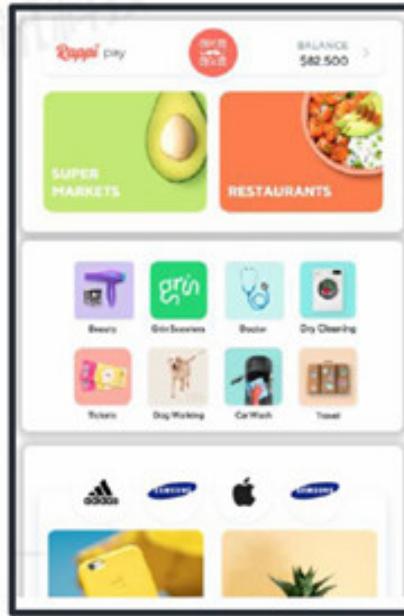
中国活跃商家



Source: Meituan Dianping Releases (2018-2019) Note: An active merchant is a merchant who has completed at least one transaction, purchased products or services, processed a payment through Meituan Dianping's service, or generated an order through Meituan Dianping's ERP system.

拉美 (Rappi)：数字化配送 800万订单，四个月增长约两倍

数字化配送平台



拉美拥有浓厚的配送文化。城市很吵闹，配送高度依赖人工，而且并非所有商店都能提供——效率很低，而且成本很高。我们的想法：如果我们能够将该生态系统数字化，并且开始以不到1美元的价格在30分钟内配送任何东西，会发生什么事情？

Rappi

拉美月度订单



Source: Rappi (6/19).

印尼 (Tokopedia)：改进1.7万岛屿的商品配送 约600万商家，一年增长约两倍

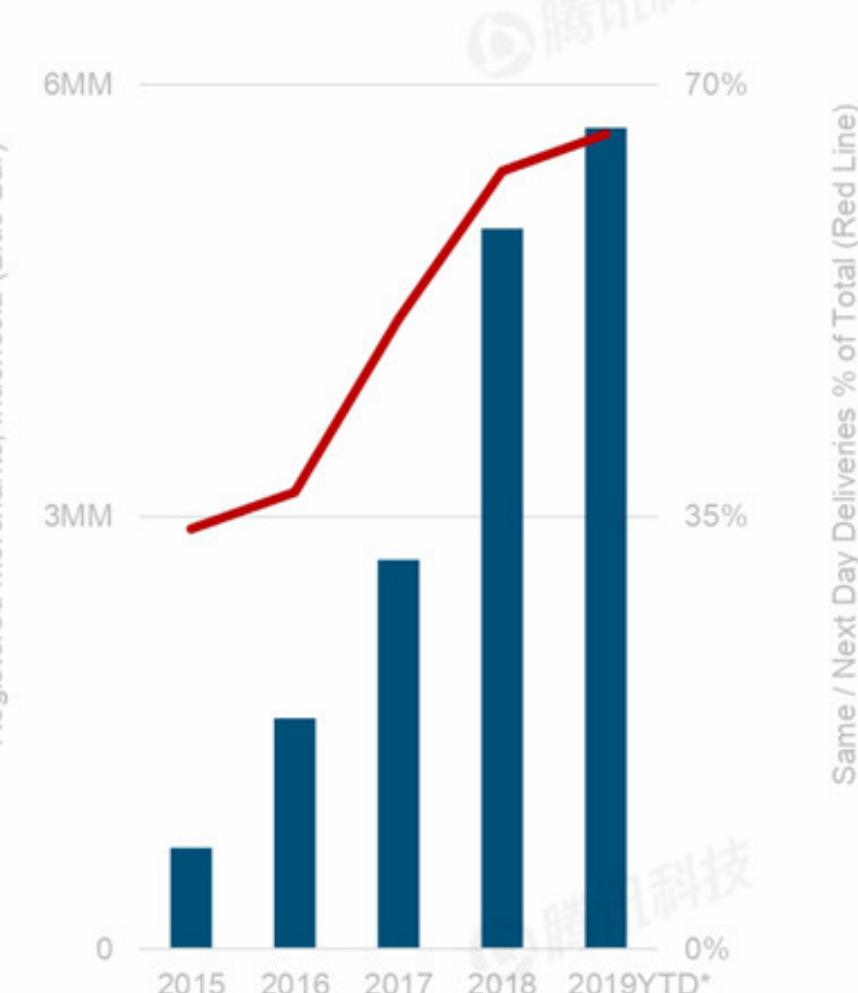
Tokopedia

当日送达



当我们查看销售数据时发现，一个岛上的人有时候并不想购买另一个岛上的商家的产品。
我们想，如果我们能够为所有加入我们平台的企业都提供一个遍布于印尼各地的仓库，会发生什么事情？所有在Tokopedia上购买的商品都可以当日送达。

商家vs.当日/次日送达，印尼



东南亚 (Shopee)：移动优先的社交商务 100亿美元商品总价值，一年增长约两倍

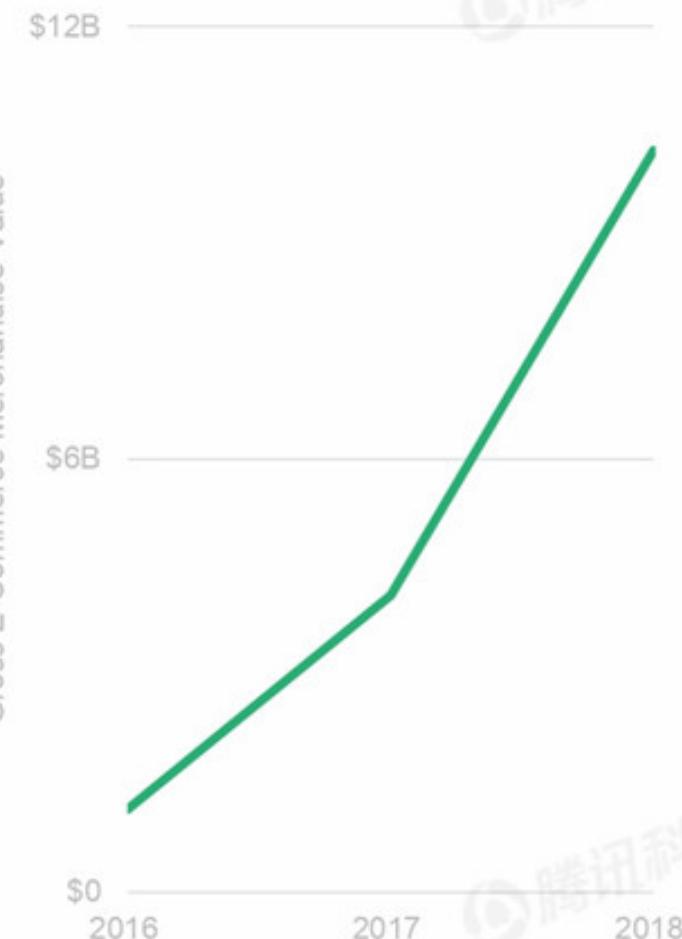
Sea Limited / Shopee

移动/社交购物



Shopee在短期内快速增长的能力对其发展重点形成了佐证，
他们一直专注于构建一个以移动为中心且强调社交互动的集市，
重点出售高度多样化的卖家提供的高利润产品。
Shopee已经将其集市业务与一体化支付、物流基础设施和一套
全面的服务结合起来。

东南亚商家总价值



印度 (Reliance Jio) : 扩大线下电子商务接触范围 3.07亿订户，一年增长约两倍

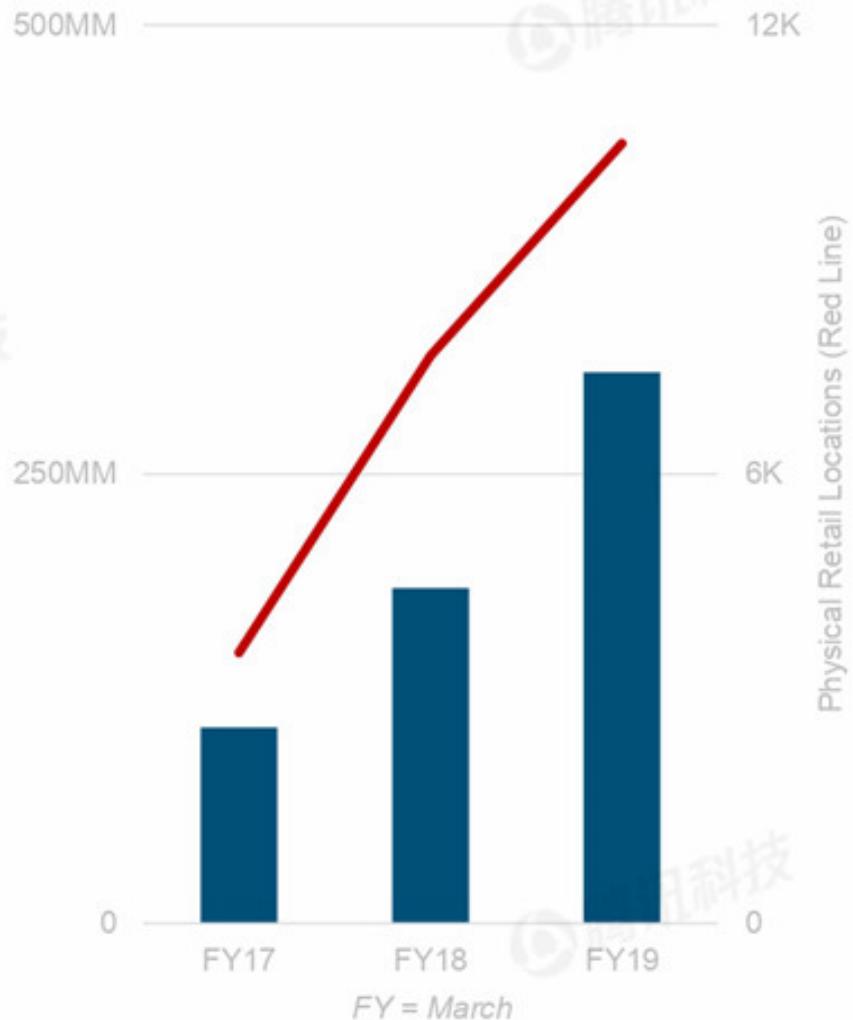
Reliance Jio

连接+零售



我们正在创建一个混合式的O2O电商平台，把Reliance Retail的实体集市与Jio的数字化基础设施和服务整合起来。这个平台将把Reliance Retail门店的3.5亿客户足迹、Jio的3.07亿上网用户和整个印度的3000万提供“最后一公里”实体市场连接服务的小商家结合起来。

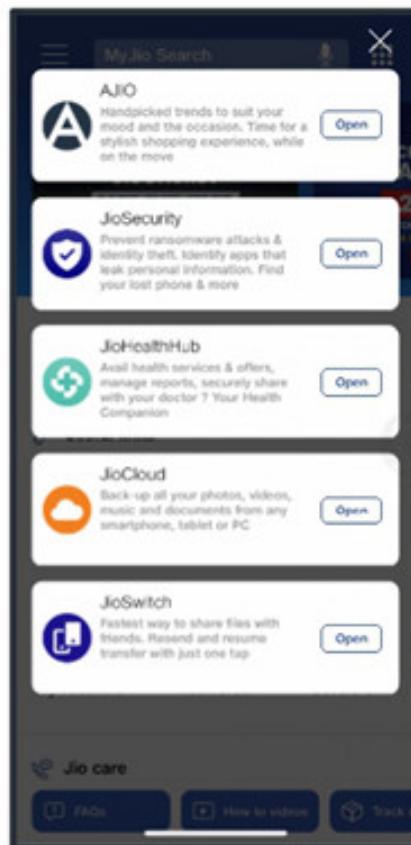
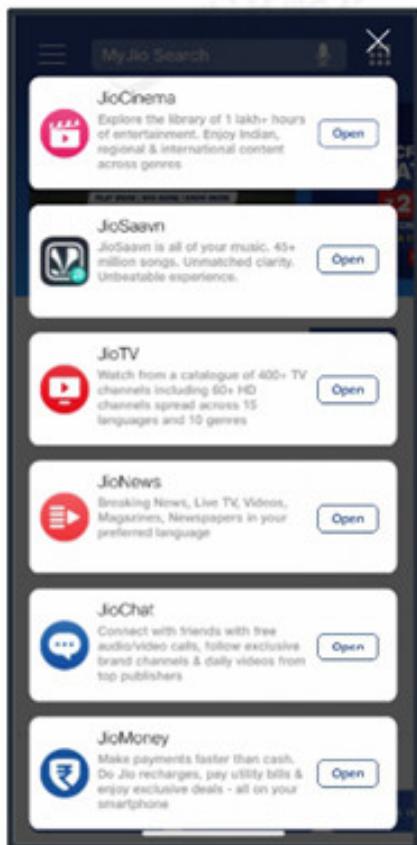
印度无线用户+线下门店



印度 (Reliance Jio)：为消费者提供Jio的广泛服务 数据使用，一年增长约两倍

Reliance Jio

全套应用



印度数据使用量



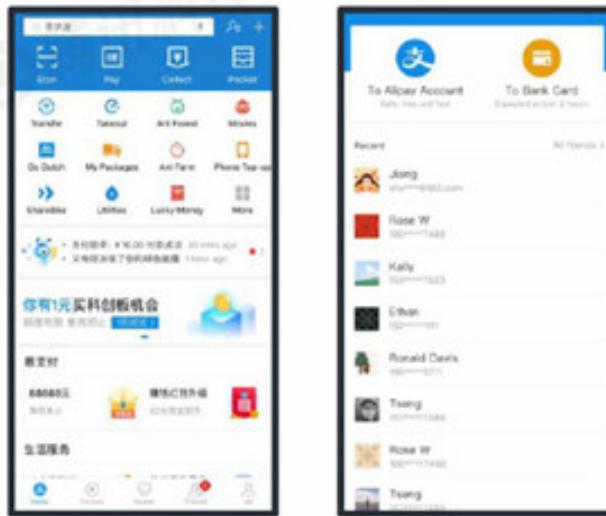
音乐...电影...电视...新闻...聊天...金融...时尚...安全...

存储...数据迁移

互联网/科技企业：
美国以外的创新依然强劲
数据驱动/直接
金融服务增长迅速

中国（支付宝）：广泛的线上/线下金融服务 10亿用户，两年增长约两倍

支付/金融服务



阿里巴巴拥有最全面的商务平台、物流和支付生态系统，

以支持零售领域的数字化转型。

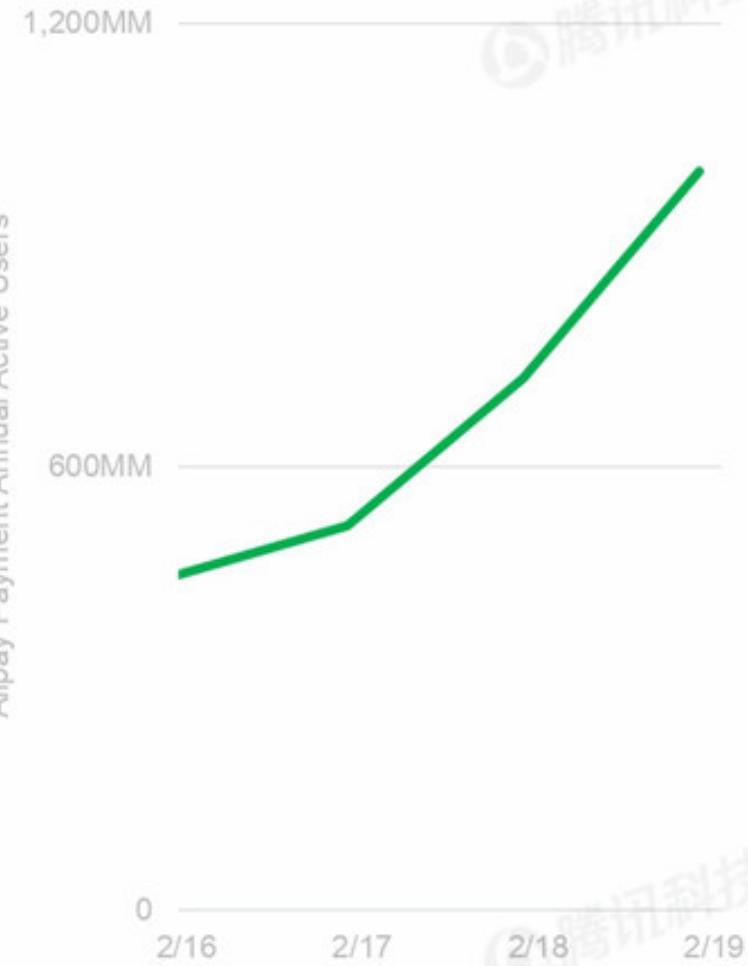
蚂蚁金服/支付宝不仅是中国的第一大移动支付平台，还为

数亿消费者和阿里巴巴平台上的数百万小企业提供贷款、

财富管理和保险产品等金融服务。

AliPay

全球年活跃用户



Source: Alibaba Releases. Alibaba Earnings Call transcript (2/18)

韩国 (Toss) : 数字支付/金融服务 约1200万用户，一年增长约两倍



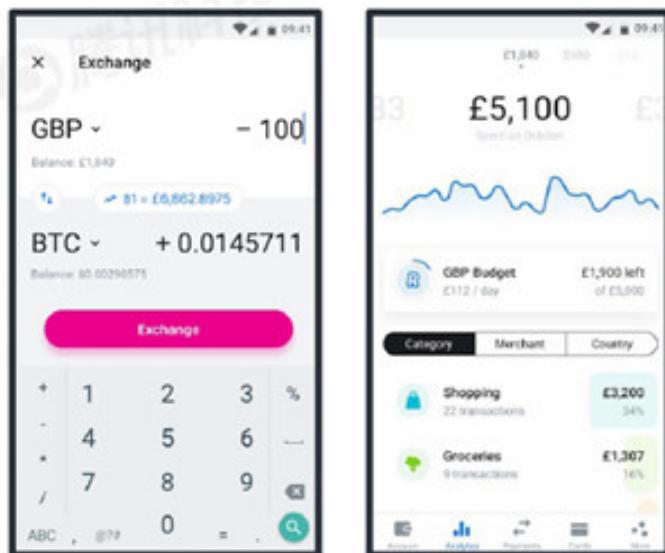
Source: Toss. Korea JoongAng Daily Interview with SG Lee (3/19)

中文版制作: 腾讯科技

欧洲 (Revolut)：个性化银行 400万用户，10个月增长约两倍

Revolut

汇款/银行



全球用户



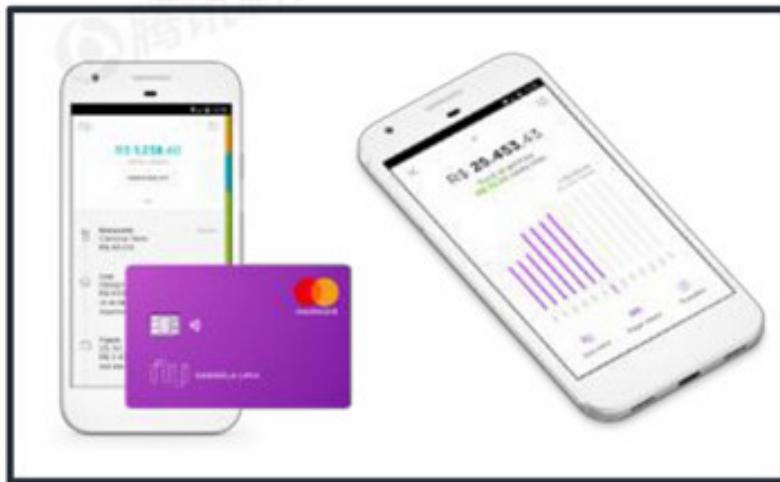
借助数据和科技进行个性化，可以让人们满足所有的金融需求。除此之外，他们还能自行选择所有设置。
我们也在大力投资数据科学和工程，以便加强决策自动化，同时加快决策速度，提升决策质量。

Source: Revolut Releases (2015-2019). Mobile Industry Eye Interview (7/18)

巴西 (Nubank) : 银行/消费信贷 约900万独立用户，一年增长约两倍

Nubank

银行/信贷



Nubank是巴西最大的纯数字银行，它提供各种金融服务，包括免费信用卡、储蓄帐户 (NuConta) 、P2P汇款、账单支付、借记卡、工资账户转移和即时奖励项目。Nubank还以极低的价格提供高度个性化的贷款，这都得益于该公司以数据驱动的直接客户关系。

巴西独立客户总数



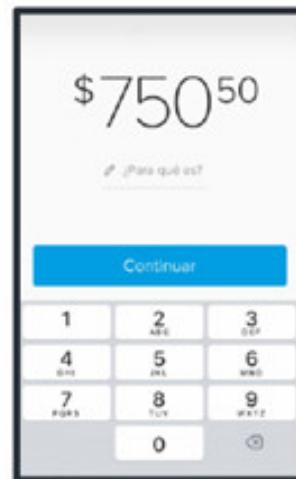
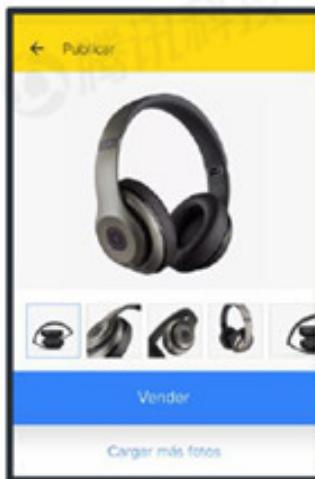
Source: Nubank (5/19)

拉美 (MercadoLibre)：电商驱动的数字支付

3.89亿比交易，两年增长约两倍

MercadoLibre

即时/MercadoPago支付



我们继续保持强劲增长，而且在MercadoPago中看到巨大潜力。

集市外交易已经超过集市内交易。

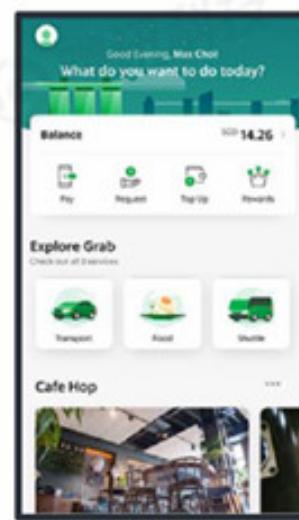
我们强劲的线下项目进一步加剧了这个趋势：我们构建了自己的移动POS网络和MercadoPago的数字钱包支付服务。

除了支付外，我们还发现，我们的资产管理、信贷产品被大量使用。这些产品帮助数百万拉美人获取金融服务，他们要么没有银行账户，要么没有充分享受银行服务。

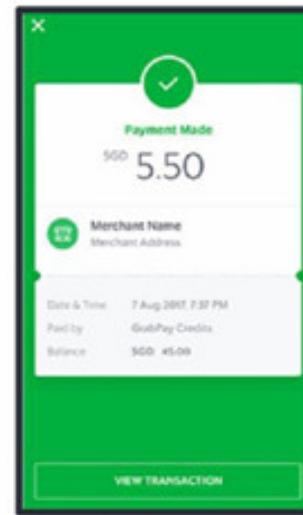
拉美年度交易



东南亚（Grab）：网约车驱动的数字支付... 交易价值，一年增长约四倍



GrabPay



东南亚只有27%的成年人拥有银行账户。

由于没有银行历史，意味着传统金融机构不了解消费者的情况——

也就无法通过获取资本来发展企业或支付住房成本。

通过在Grab网约车平台上推出GrabPay，

Grab的数百万用户得以接触他们无法通过

传统银行和贷款机构获取的金融服务。

Reuben Lai – Senior Managing Director, Grab Financial Group, 5/19

Grab

东南亚GrabPay交易价值



Source: Grab Financial Group (3/18-5/19).

Usage =

Images...

Increasingly Relevant Way to Communicate

使用：

图片...
越来越重要的沟通方式

图片： 最古老的通信传播方式

40K Years Ago =

*Oldest Known Image...
Painting, Indonesia*



4万年前：
已知的最古老图片...
绘画，印尼

5K Years Ago =

*Oldest Known Text...
Cuneiform, Mesopotamia*



5000年前：
已知的最古老文字...
楔形文字，美索不达米亚

131 Years Ago =

*Oldest Known Moving Image...
Video, United Kingdom*



131年前：
已知的最古老动图...
视频，英国

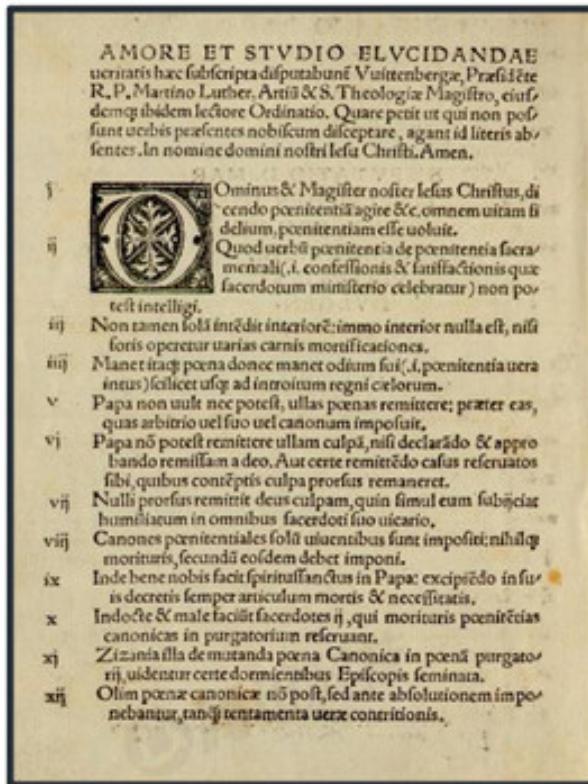
几个世纪以来...

人们已经学会
撰写和分享文字...

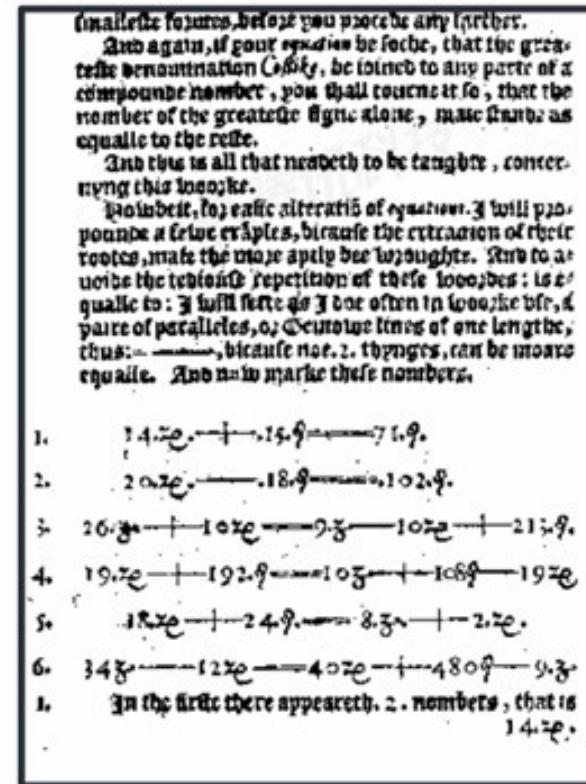
线下&一对一/多人...

通过文本 (+数字) 沟通： 基础

Makes Ideas
Transportable...
传播思想
*Martin Luther's
95 Theses
(1500s)*



...Simplifies
Concepts...
简化概念
*Robert Recorde's
invention of '='
(1500s)*



...Enables
Learning
促进学习
*Modern 'Public'
Primary Schools
(1800s – Present)*



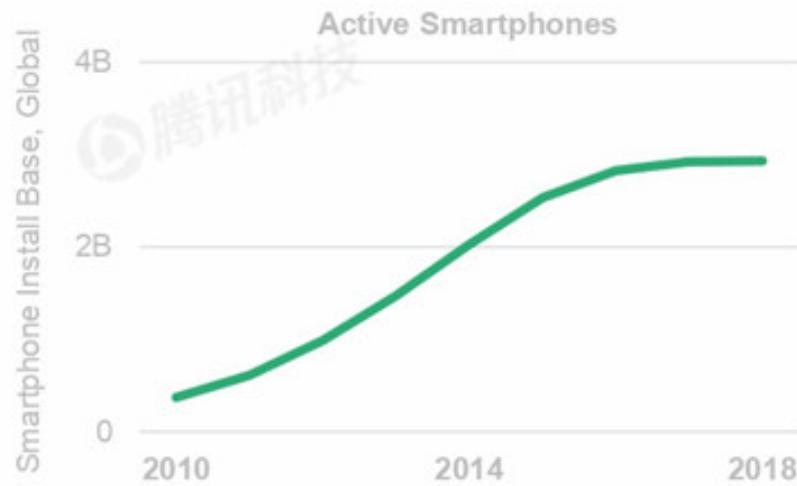
...二十年来...

人们加大
图片+视频制作/分享力度...

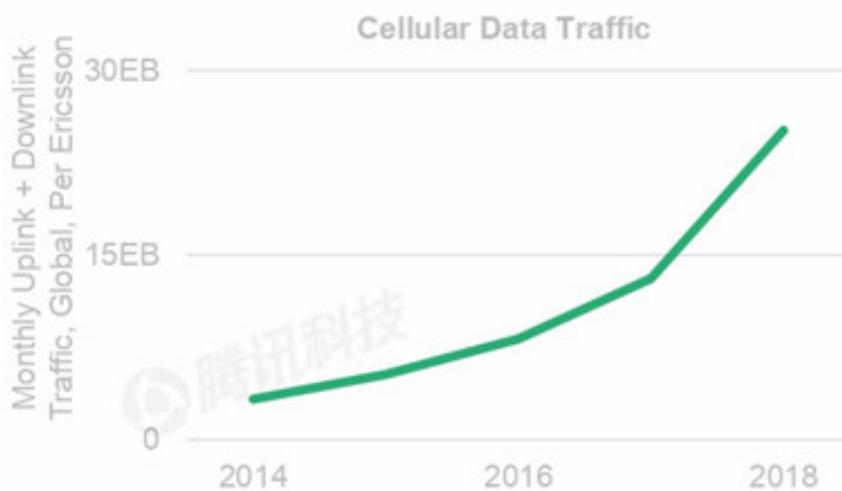
在线&往往是一对多

图片制作： 基础继续加强

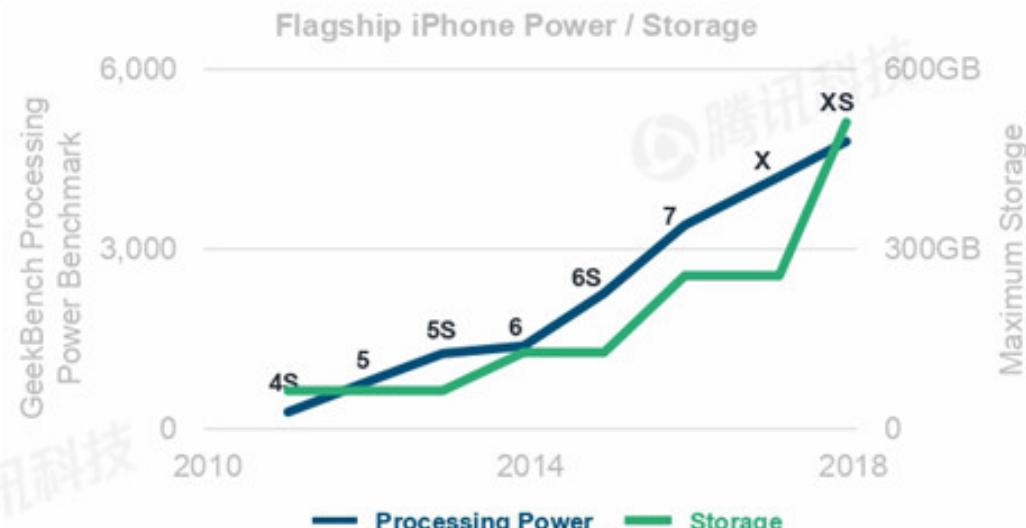
智能手机/相机用户 Smartphone / Camera Base...



蜂窝数据使用 ...Cellular Data Use...



智能手机性能 ...Smartphone Power...



WIFI覆盖 ...WiFi Reach

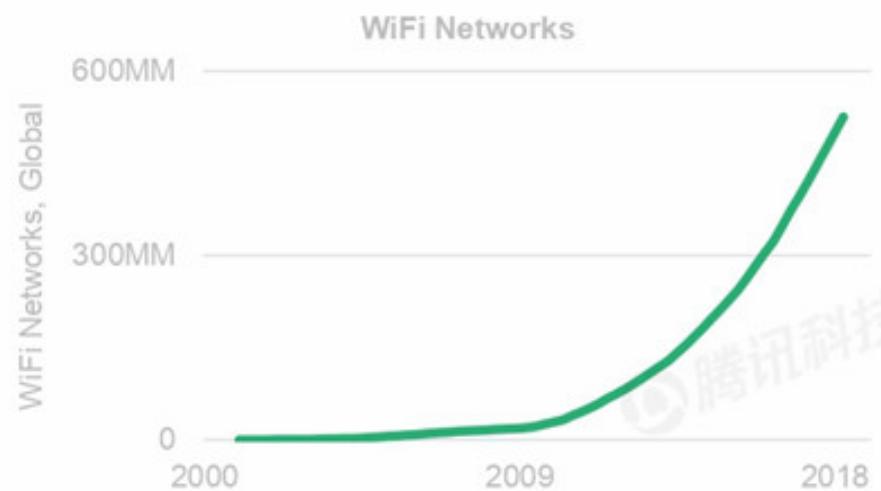


Image Sharing = Foundations Continue to Ramp

Image Creation 图片制作

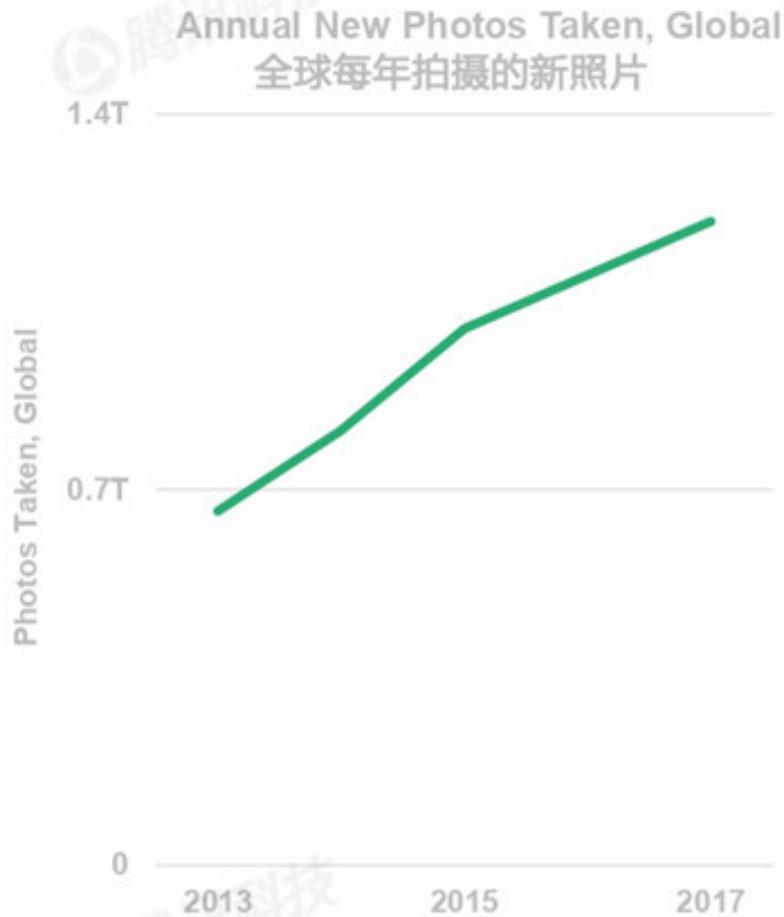
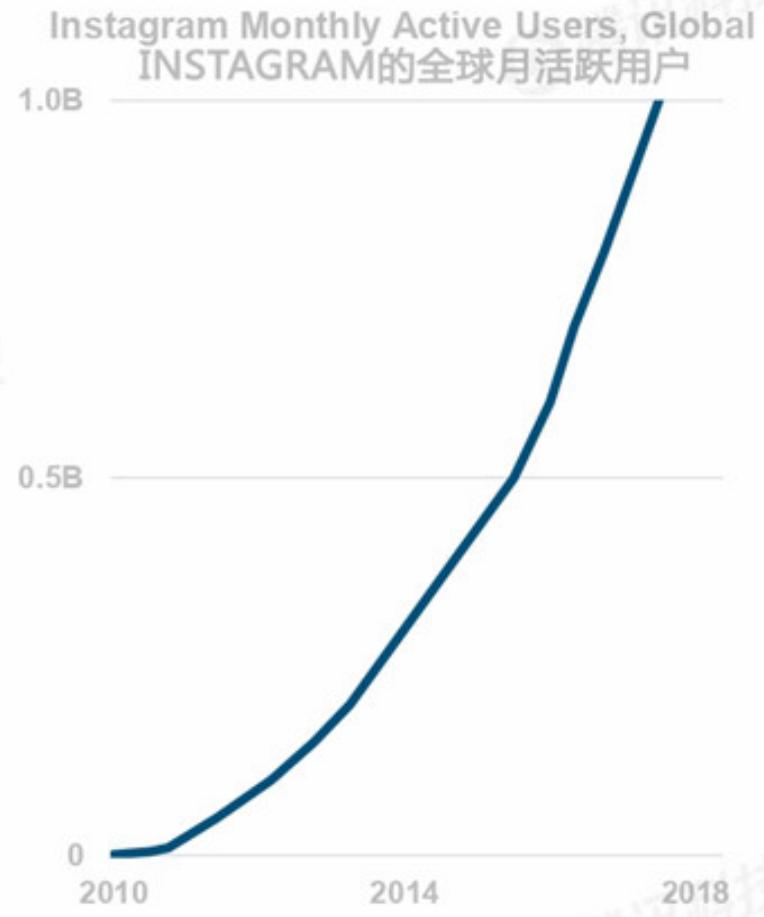


Image Sharing 图片共享

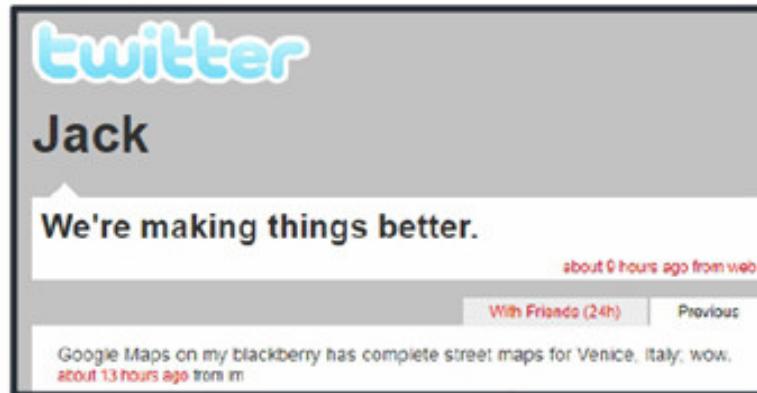


Source: Photo Creation Per InfoTrends Digital Imaging Reporter's State of the Industry 2018. Instagram releases.

中文版制作: 腾讯科技

图片制作+分享： 互动继续加强

Twitter (2006) = Text-Only 纯文本



Twitter (2019) = Text + Images + Video

文本+图片+视频



>50% of Tweet Impressions =
Images / Video / Other Media

>50%的推文展示量：
图片/视频/其他媒体

Source: Twitter. Note: Other media includes GIFs, Audio & other non image / video media types

中文版制作: 腾讯科技

... 图片制作+分享： 平台功能+使用量持续加强..

Instagram Image Sharing Enhancement Evolution INSTAGRAM图片分享进化过程

Image Editing /
Sharing
图片编辑/共享

2011



Data-Driven
Discovery
数据驱动发现

2015

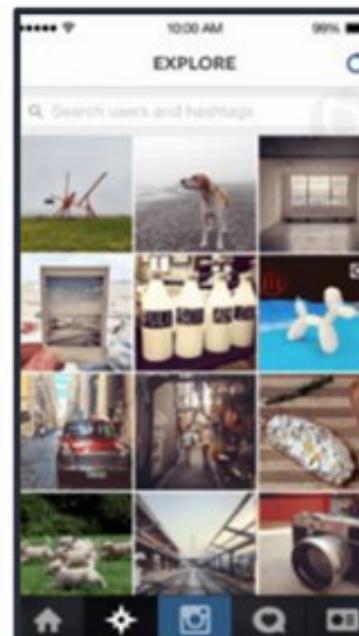


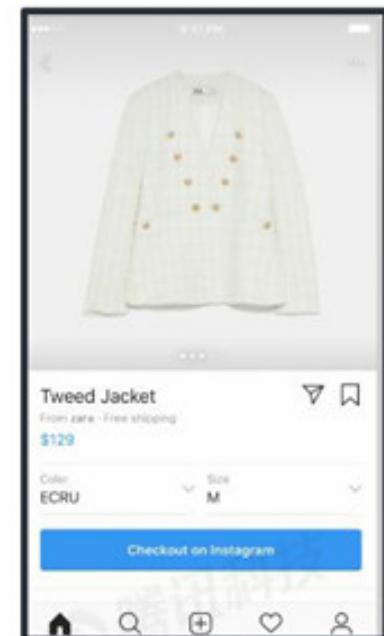
Image + Video
Stories
图片+视频故事

2016



Commerce
电商

2019



Source: Instagram Releases (2011 / 2015 / 2016 / 2019)

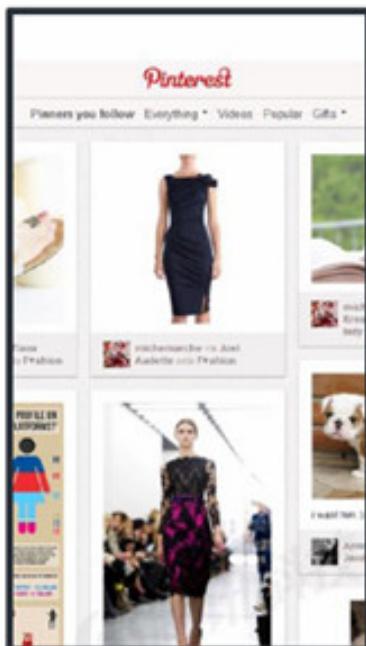
... 图片制作+分享： 平台功能+使用量持续加强

Pinterest Image Sharing Enhancement Evolution

PINTEREST图片分享进化过程

Image
Organization /
Sharing
图片组织/分享

2011



Video
Organization /
Sharing
视频组织/分享

2012

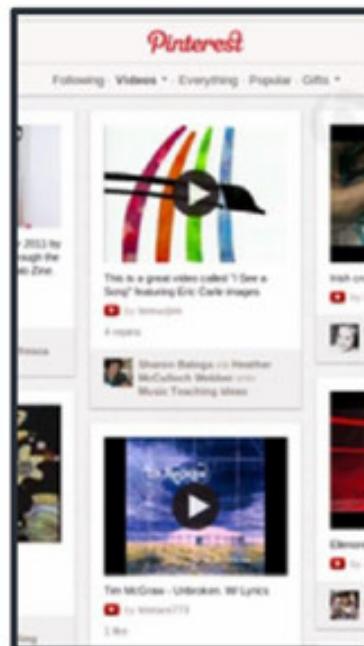


Image-
Powered
Search
图片驱动的搜索

2015

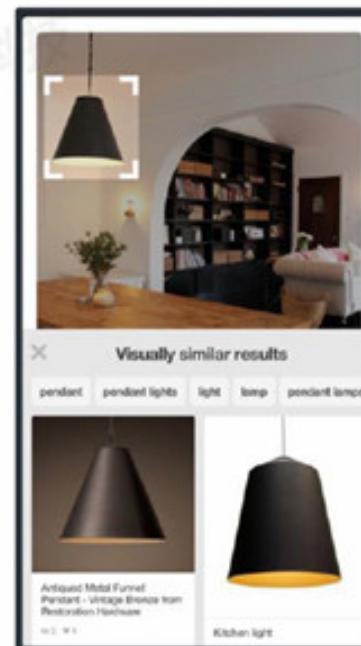
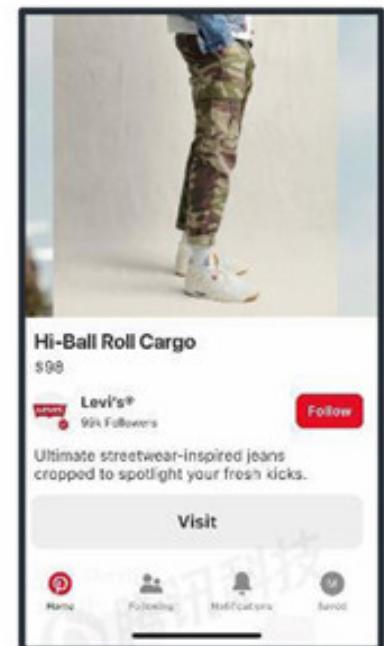


Image-Driven
Discovery /
Commerce
图片驱动的发现/电商

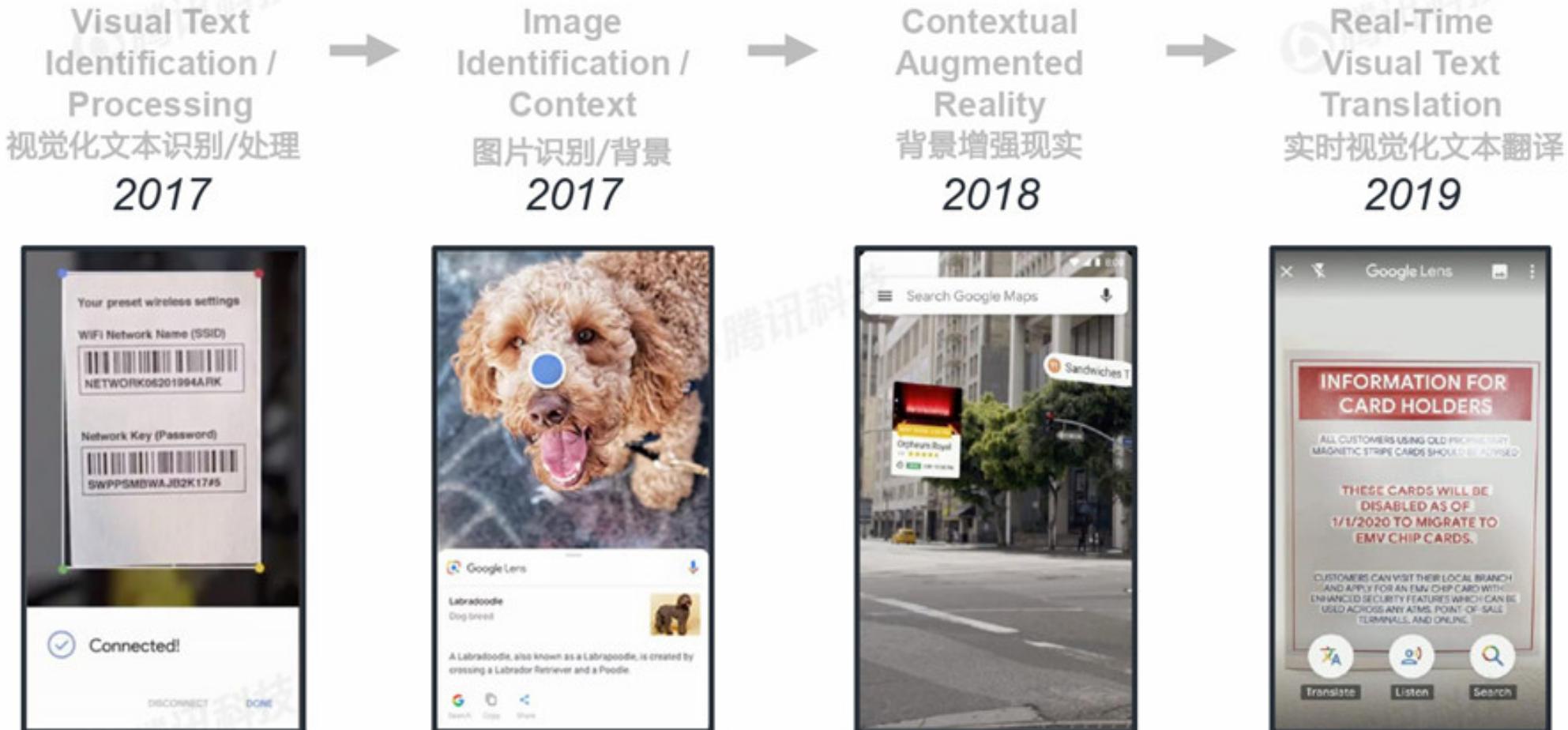
2019



Source: Pinterest Releases (2011 / 2012 / 2015 / 2019)

基于图片的通讯： 得到计算机视觉+人工智能的促进

Google Lens + AR Image Analysis / Communication Evolution GOOGLE LENS+增强现实图片分析/通信革命



Source: Google (2017-2019)

中文版制作: 腾讯科技

People =

*Increasingly Telling Stories via
Edited Images / Videos*

越来越多的故事通过
编辑过的图片/视频传播

编辑过的图片： 增长迅速

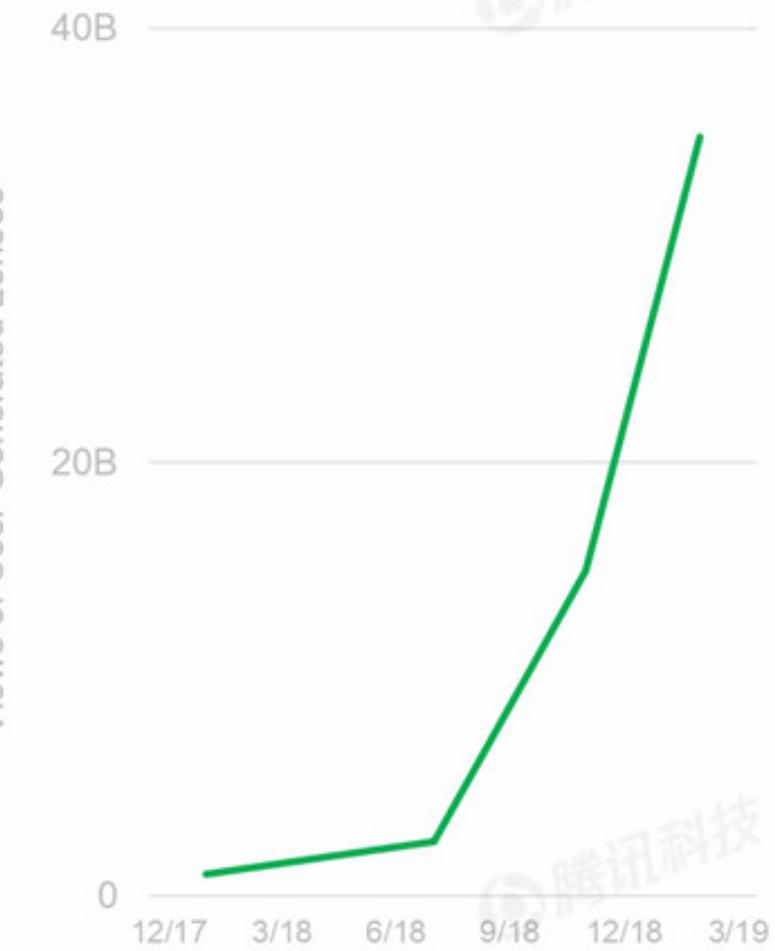
Snap Lens Studio

User Generated / Custom Augmented Reality
用户制作/个性化增强现实



Snap Community Lens Views

SNAP社区滤镜查看量



Source: Snap Inc. Q4:17 Earnings Call (2/18), Snapchat Blog Post (7/18), Adweek (11/18), Engadget (2/19)

中文版制作: 腾讯科技

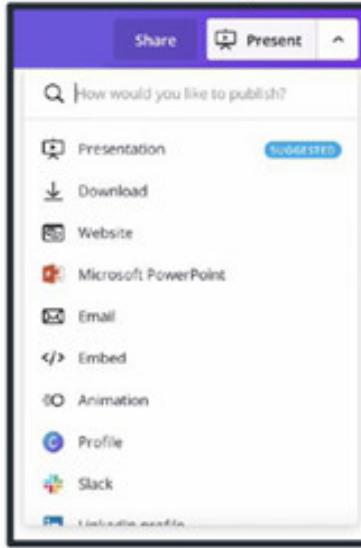
基于图片的设计流畅度+讲故事：

**越来越多的自学+协作...
仍处于早期**

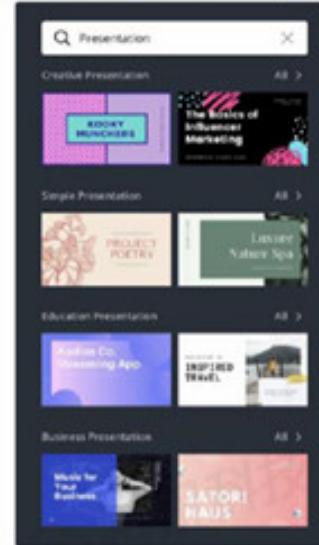
设计流畅性+讲故事 (CANVA) :

简单/协作/反馈驱动的设计

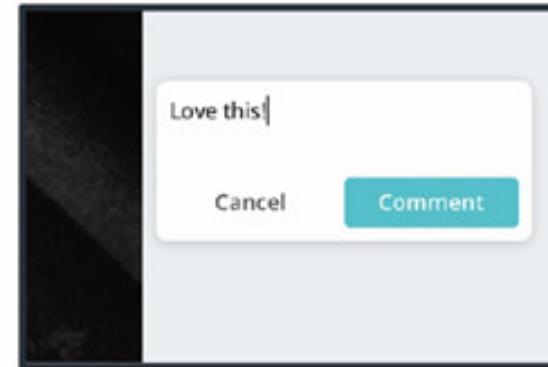
随处发布
Publish Anywhere



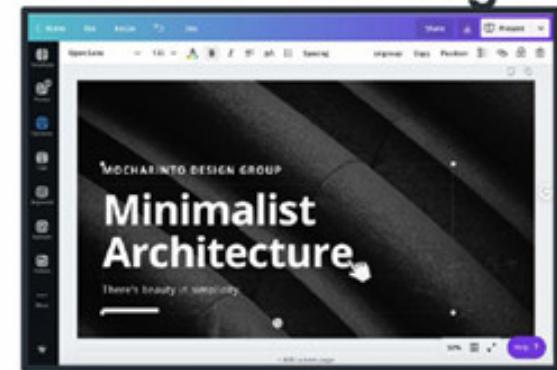
选择模板
Choose Template



团队协作
Collaborate in Teams



定制设计
Customize Design



人类一直都喜欢视觉化——我们的大脑就是针对图片优化的。
书写很乏味，是一种迂回之策。

形象化的语言才是我们最初的沟通方式——我们绕了一个圈又回来了。

我们返回到最自然的方式。
INSTAGRAM一直都是一个交流平台，而不是图片分享工具。

INSTAGRAM挑战了一种观念，即美以传统的艺术形式体现...
关键不在于美，而在于你所讲的故事。

INSTAGRAM的固有反馈系统帮助用户不断改进沟通技巧。

凯文·希斯特罗姆——INSTAGRAM联合创始人，2019年5月

Picture or 1,000 Words? 一图抵千言？



Mallard Duckling making a running leap into the water from the rock ledge at Argyle Lake, Babylon, Long Island. Mallard ducks are the most common & recognizable wild ducks in the Northern Hemisphere. They spend most of their time near natural bodies of water (ponds, marshes, streams, & lakes) where they feed on plants, invertebrates, fish, and insects. Mallards are dabbling, or surface-feeding, ducks because they eat by tipping underwater for food—head down, feet and tail in the air—rather than diving. Mallards also forage and graze for food on land. The male mallard duck, called a drake, sports a glossy green head, a white ring around its neck and a rich, chestnut-brown breast. The mallard duck's outer feathers are waterproof, because of an oil that's secreted from a gland near the tail. Soon after birth, baby ducks, called ducklings, open their eyes. A little more than a day after hatching, ducklings can run, swim, and forage for food on their own. They stay in the nest for less than a month. A group of ducklings is called a brood. Outside the nest, the brood sticks close by the mother for safety, often following behind her in a nest, single-file line. Mallard Duckling making a running leap into the water from the rock ledge at Argyle Lake, Babylon, Long Island. Mallard ducks are the most common & recognizable wild ducks in the Northern Hemisphere. They spend most of their time near natural bodies of water (ponds, marshes, streams, & lakes) where they feed on plants, invertebrates, fish, and insects. Mallards are dabbling, or surface-feeding, ducks because they eat by tipping underwater for food—head down, feet and tail in the air—rather than diving. Mallards also forage and graze for food on land. The male mallard duck, called a drake, sports a glossy green head, a white ring around its neck and a rich, chestnut-brown breast. The mallard duck's outer feathers are waterproof, because of an oil that's secreted from a gland near the tail. Soon after birth, baby ducks, called ducklings, open their eyes. A little more than a day after hatching, ducklings can run, swim, and forage for food on their own. They stay in the nest for less than a month. A group of ducklings is called a brood. Outside the nest, the brood sticks close by the mother for safety, often following behind her in a nest, single-file line. Mallard Duckling making a running leap into the water from the rock ledge at Argyle Lake, Babylon, Long Island. Mallard ducks are the most common & recognizable wild ducks in the Northern Hemisphere. They spend most of their time near natural bodies of water (ponds, marshes, streams, & lakes) where they feed on plants, invertebrates, fish, and insects. Mallards are dabbling, or surface-feeding, ducks because they eat by tipping underwater for food—head down, feet and tail in the air—rather than diving. Mallards also forage and graze for food on land. The male mallard duck, called a drake, sports a glossy green head, a white ring around its neck and a rich, chestnut-brown breast. The mallard duck's outer feathers are waterproof, because of an oil that's secreted from a gland near the tail. Soon after birth, baby ducks, called ducklings, open their eyes. A little more than a day after hatching, ducklings can run, swim, and forage for food on their own. They stay in the nest for less than a month. A group of ducklings is called a brood. Outside the nest, the brood sticks close by the mother for safety, often following behind her in a nest, single-file line. Mallard Duckling making a running leap into the water from the rock ledge at Argyle Lake, Babylon, Long Island. Mallard ducks are the most common & recognizable wild ducks in the Northern Hemisphere. They spend most of their time near natural bodies of water (ponds, marshes, streams, & lakes) where they feed on plants, invertebrates, fish, and insects. Mallards are dabbling, or surface-feeding, ducks because they eat by tipping underwater for food—head down, feet and tail in the air—rather than diving. Mallards also forage and graze for food on land. The male mallard duck, called a drake, sports a glossy green head, a white ring around its neck and a rich, chestnut-brown breast. The mallard duck's outer feathers are waterproof, because of an oil that's secreted from a gland near the tail. Soon after birth, baby ducks, called ducklings, open their eyes. A little more than a day after hatching, ducklings can run, swim, and forage for food on their own. They stay in the nest for less than a month. A group of ducklings is called a brood. Outside the nest, the brood sticks close

Source: Photo Credit = Beth A Keiser/AP

中文版制作: 腾讯科技

Usage =

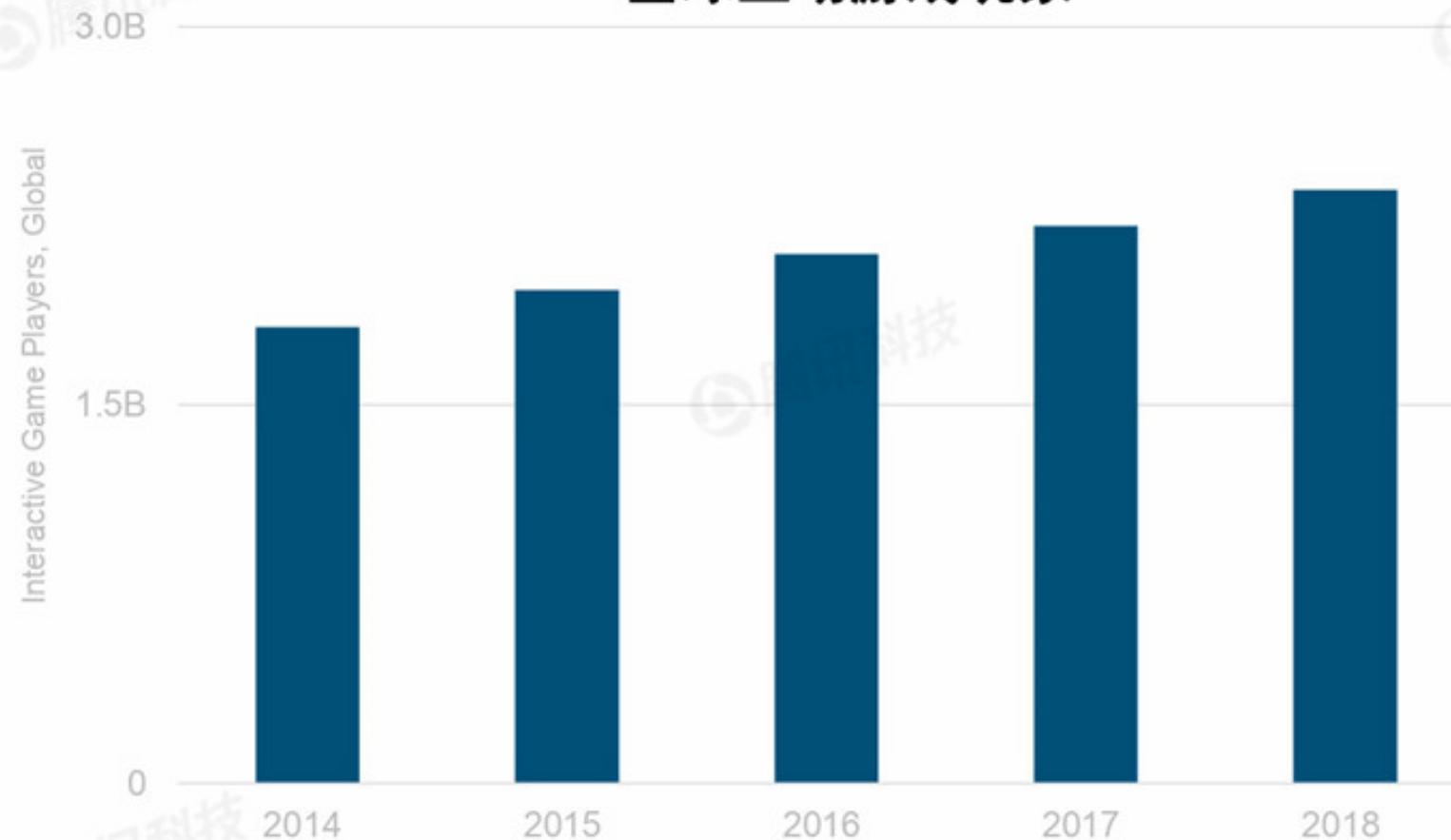
*Interactive Gaming...
Increasingly Relevant Way to Communicate*

使用：

**互动游戏...
越来越重要的沟通方式**

互动游戏玩家： 加速增长，达到24亿，年增长6% VS. 5%

Interactive Game Players, Global
全球互动游戏玩家



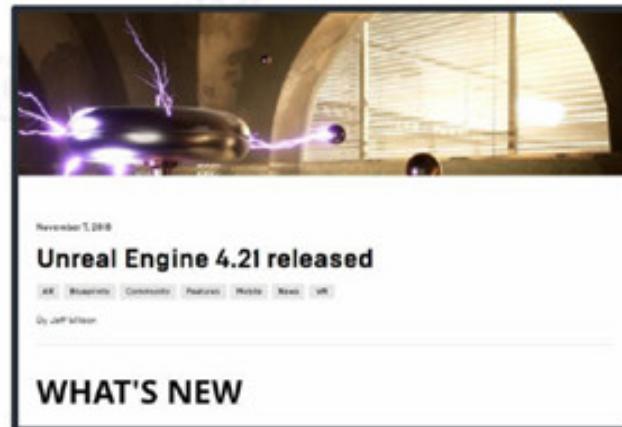
Source: Newzoo Global Games Market Reports (2016-2018).

Interactive Game Players = People who have played a game across console / PC / mobile platforms in the past year.

中文版制作: 腾讯科技

互动游戏创新： 增长...各个平台

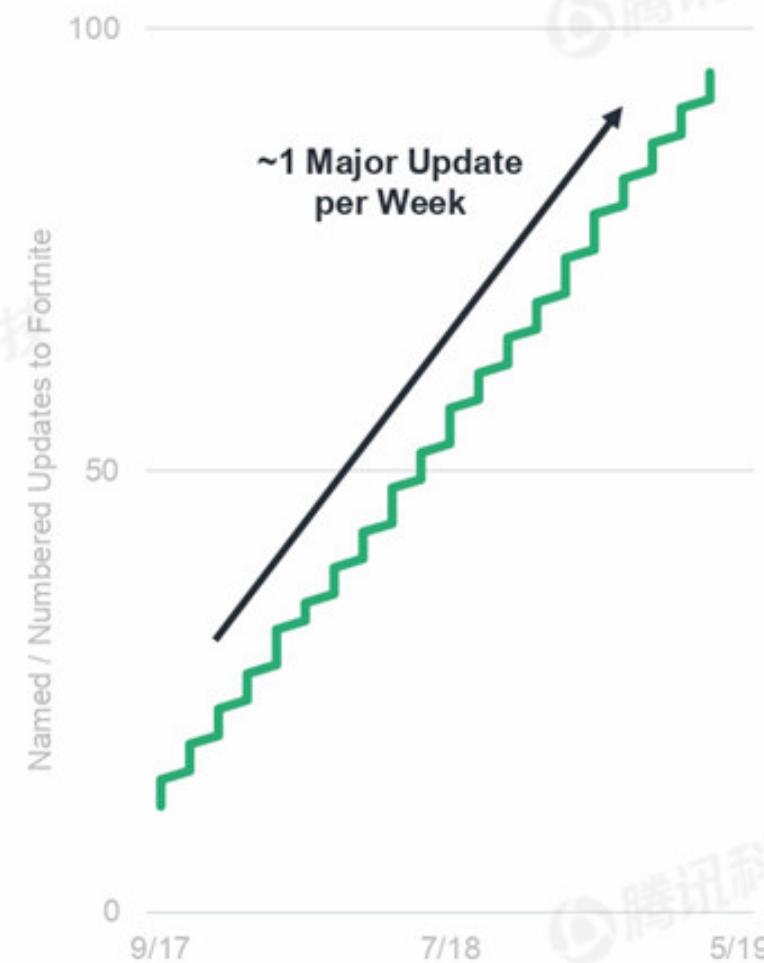
游戏引擎创新...



Unreal Engine 4.21继续推进我们的不懈追求，在任何平台的所有项目上实现更高效率、更高性能和更强的稳定性。我们简化了过程，加快创作速度...

我们总是寻找各种方式来简化日常任务，这样开发者就能专心创作富含意义且令人惊叹的互动体验...借助优化加快迭代速度，使用新的Gauntlet自动框架运行自动化测试来寻找问题，并加快日常工作流.....

...对《堡垒之夜》频繁进行大规模更新



Source: Epic Games. (11/18). Note: Major update = named / numbered update to Fortnite.

互动游戏：

实时
玩游戏+谈话/文本+观看...

近乎全方位的社交

互动游戏（玩游戏）：

《堡垒之夜》超过2.5亿用户，七大平台同比增长两倍

Epic的《堡垒之夜》跨平台进化 vs. 注册用户

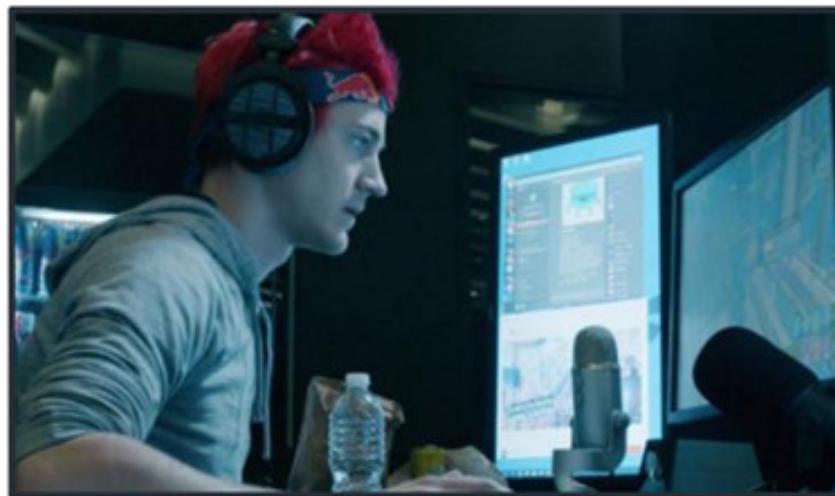
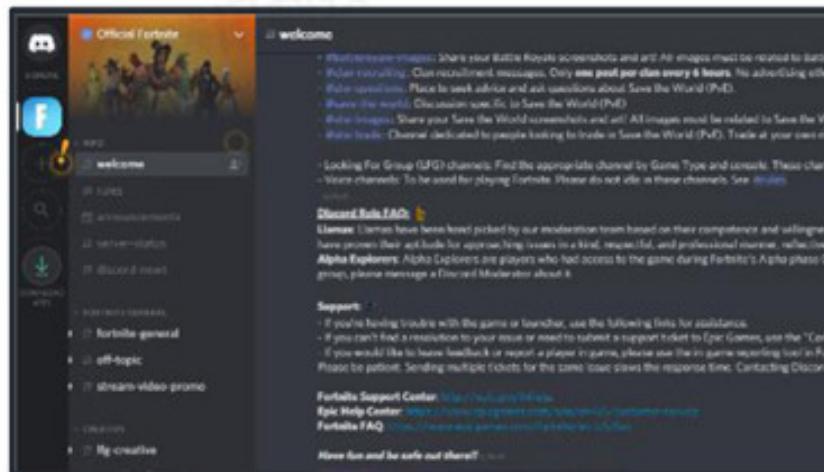
1	September 2017 Fortnite Battle Royale Launches on PC / Mac / PS4 / Xbox One With Limited Cross Platform Support
2	March 2018 V3.4 Patch is Released Allowing Users to Send & Receive Squad Invites Cross-Platform
3	April 2018 Fortnite Launches to Public in iOS App Store, Allowing Cross-Platform Mobile Play
4	June 2018 Fortnite Launches on Nintendo Switch... Available on All Major Current Generation Consoles
5	October 2018 Fortnite for Android Launches to Public



Source: Epic Games (9/17-3/19)

互动游戏（文本/谈话）： Discord达到2.5亿用户，同比增长约两倍

Discord文本/语音聊天



Discord Registered Users

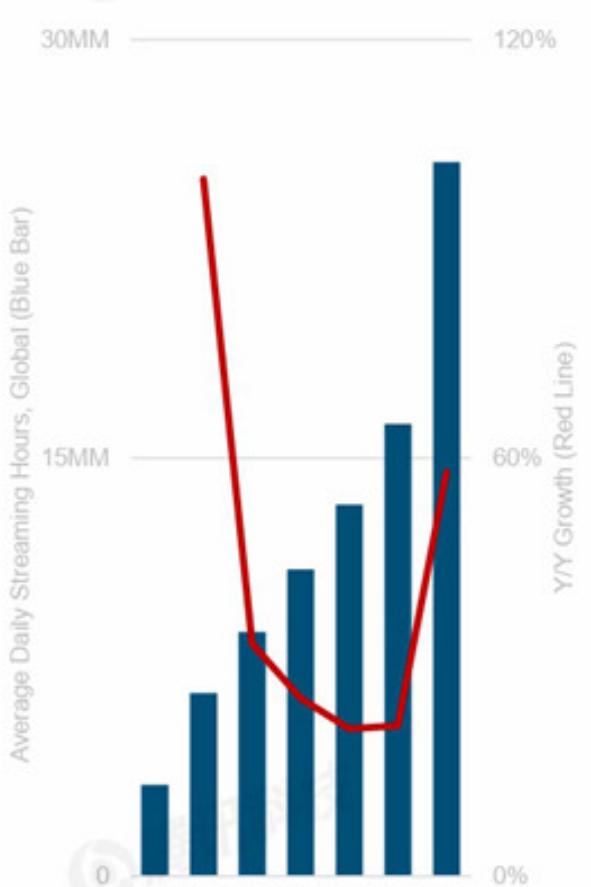


Source: Discord (5/17-4/19).

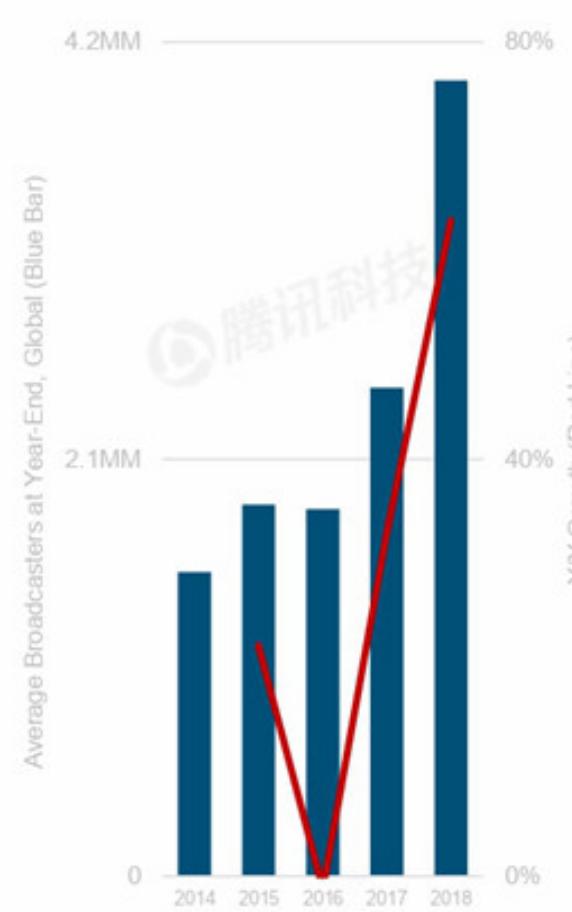
互动游戏（观看）： Twitch...时间+观众，两年增长约两倍

Twitch

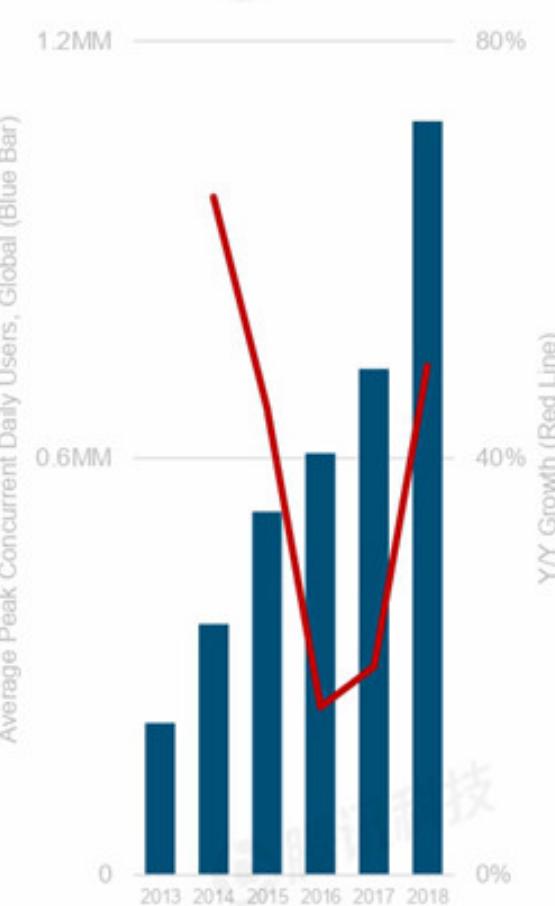
每日流媒体播放小时



月活跃播主数



最高同时在线观众



Source: TwitchTracker (4/19). Note: *Active broadcasters at year end refers to the number of broadcasters who have streamed in the month of December for a given year. **Average concurrent users refers to the average daily peak of users viewing content on Twitch across a year.

堡垒之夜：Battle Royale... 游戏环境上限为100人群组...

多人/跨平台Battle Royale

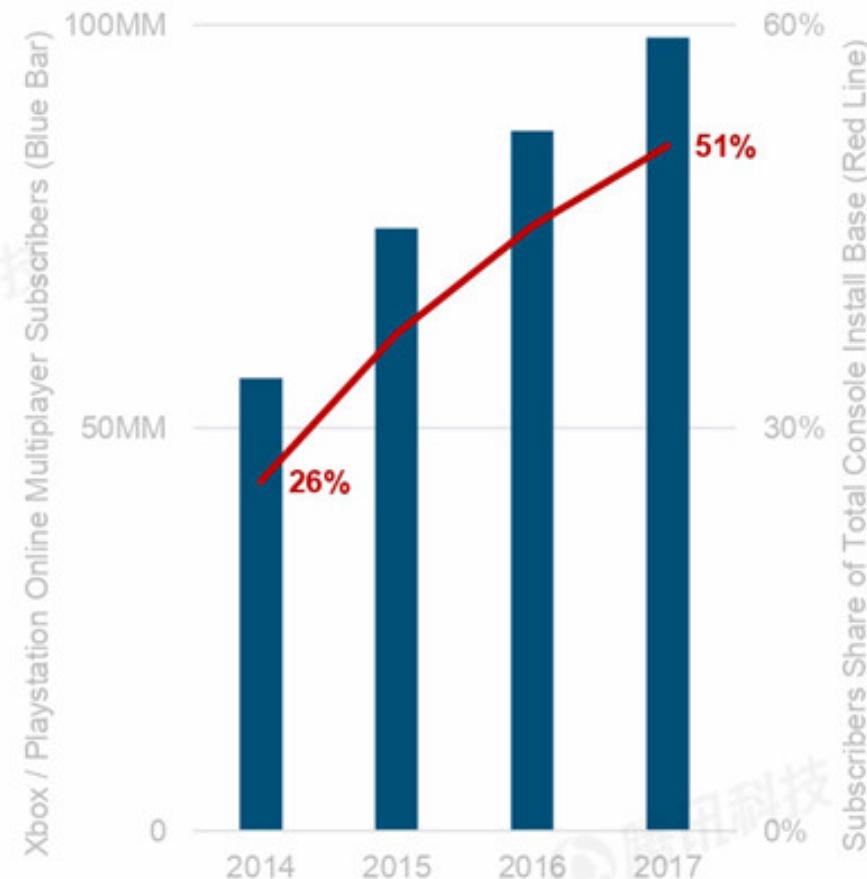


100 Players in Shared World



Players Win via Discovering Items & Outlasting Others

主机-多玩家订户



...堡垒之夜：活动... 共享体验上限为100人群组...

游戏内活动/体验



Marshmello Concert (2/19)
11MM Player-Viewers



Cube Opening (11/18)
8MM Player-Viewers

《堡垒之夜》青少年玩家调查

《堡垒之夜》帮助过你_____?

50% = 学习团队技能

44% = 在线交友

40% = 提高沟通技能

39% = 拉近兄弟姐妹之间的关系

...堡垒之夜：语音聊天... 协作式交流上限为16名队员

要真正了解协作式游戏和社交体验的未来，

你需要一个大规模的社区来推动这一前景的实现。

我们在《堡垒之夜》上非常努力地维护一种安全的在线体验——

例如，你只能跟你的队友聊天。

不能跟附近的人聊天，所以一个人不可能因为另一个素不相识的人而悲伤。



Strategize / Bond With Team in
Pre-Game Lobby via Voice



Real-Time In-Game Collaboration With
Team via Voice

互动游戏...

共享环境
拥有共同的目标：

新的社交/好友网络？

重塑周围的现实
玩游戏+解决问题

免费增值商业模式：

增长&扩容..
在企业/消费市场仍处于早期

'Freemium' coined by Fred Wilson (Union Square Ventures) & Jarid Lukin in 2006

中文版制作: 腾讯科技

免费增值业务：

免费用户体验带来更多的使用/参与/社会分享

收费用户体验推动货币化/产品创新

免费增值模式的演进

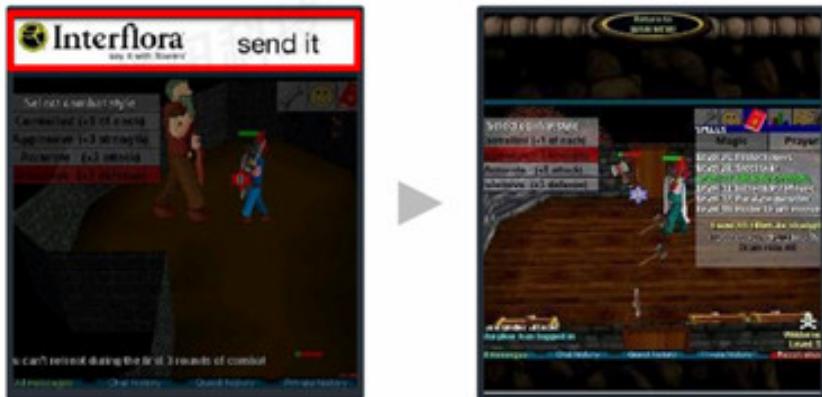
Freemium Business Model Evolution =

Gaming → Enterprise → Consumer

游戏--> 企业 --> 消费者

免费增值游戏（2001）： RUNESCAPE项目

免费 Free
和其他人一起玩



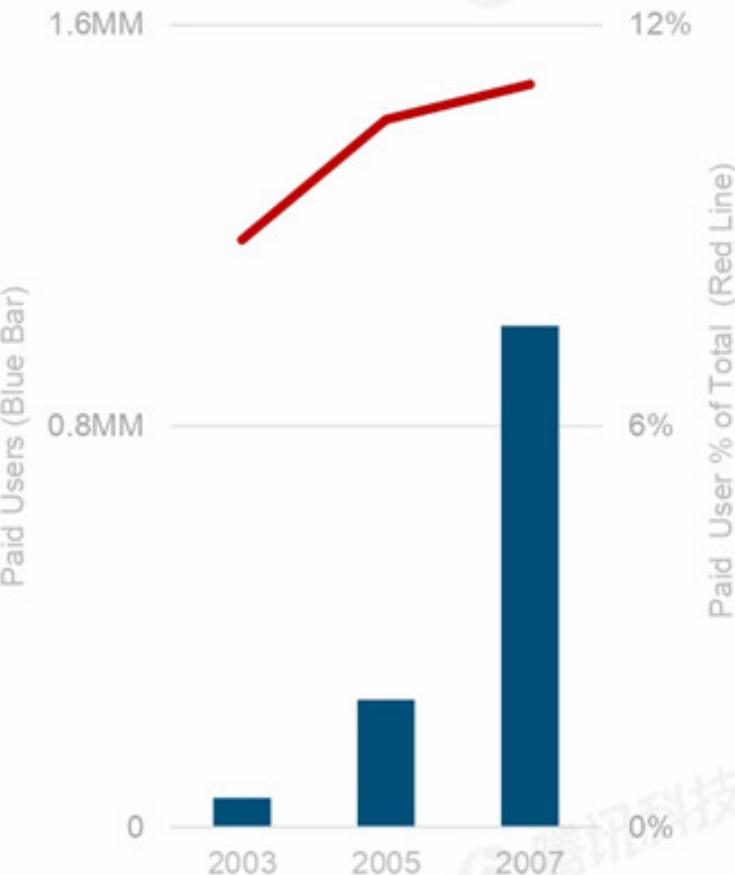
2001年，我发起了RUNESCAPE项目
最初的计划是免费提供服务，但是通过广告收入来支撑
这样一个兴趣项目，但是当互联网泡沫开始破灭的时候，
网络广告干涸，没有收入来支付游戏服务器费用。

随后我们开始了游戏会员模式
只要有人在玩游戏，我们就能够持续在游戏上投资
我们投资越多，业务增长越迅猛

安德鲁·高尔（ANDREW GOWER）
——RUNSCAPE/JAGEX创始人，5/07

增值模式 Premium
提高用户体验

付费用户+总体份额



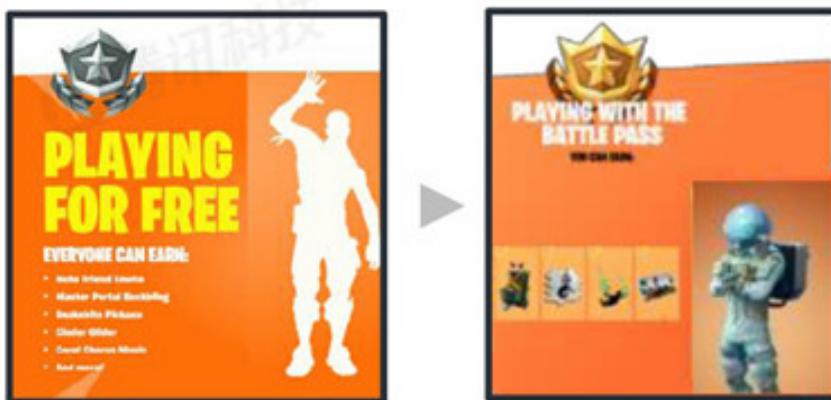
Source: Jagex releases, as compiled by The Guardian (12/03), Gameindustry.biz (2/05),
Runescape Blog (5/07) & GigaOM (6/07). Andrew Gower Interview first appeared on gamasutra.com (5/07).
Note: Users refer to monthly active users. Total Users refers to active users (free + paid) in relevant period.

中文版制作：腾讯科技

…免费增值游戏项目（2017）： EPIC公司“堡垒之夜”

免费 Free

和其他人一起玩



人们开始在一种社交体验上花费时间，
我认为这是一个非常积极的趋势。这也是你在“堡垒之夜”
游戏中体验到的一个魅力。许多人和朋友们组成了一个团队，
他们甚至展开语音聊天。

他们在玩一个视频游戏，但是他们实际上在做的事情是和朋
友们共度时光，彻夜聊天。

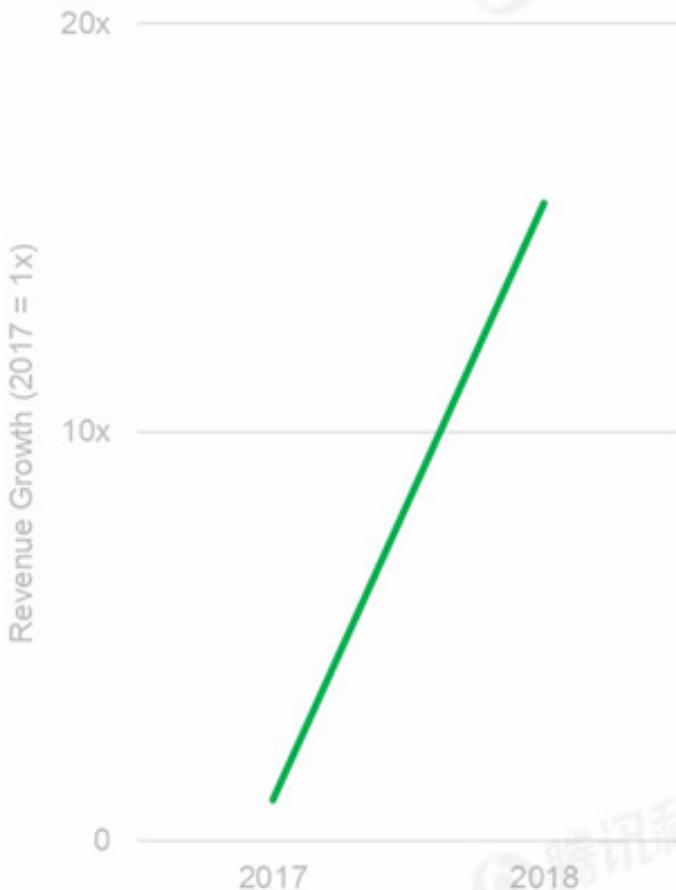
只要开发者能够让游戏保持新鲜有趣，那么这种模式能够永
远持续下去。我们能做到这一点，而且我们已经在免费游戏
中寻找到了商业模式。

蒂姆·斯维尼——EPIC游戏公司创始人兼首席执行官 3/19

增值模式

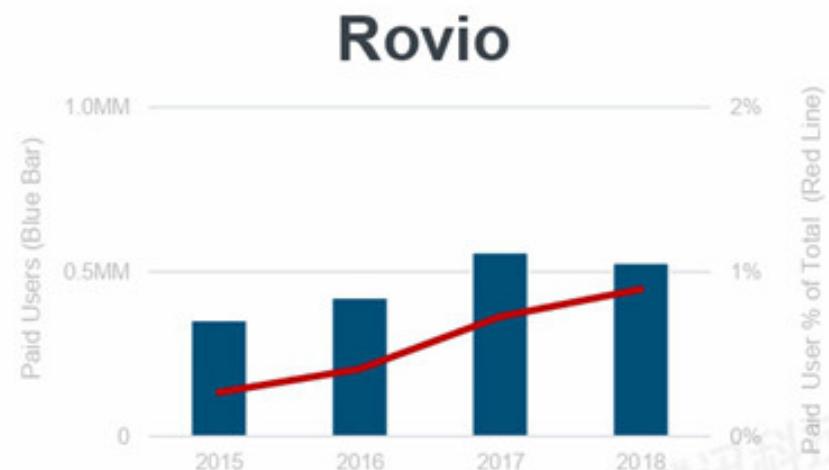
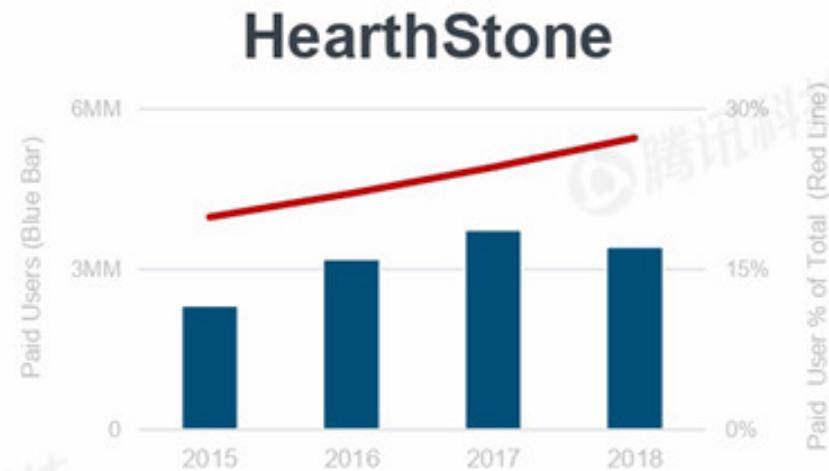
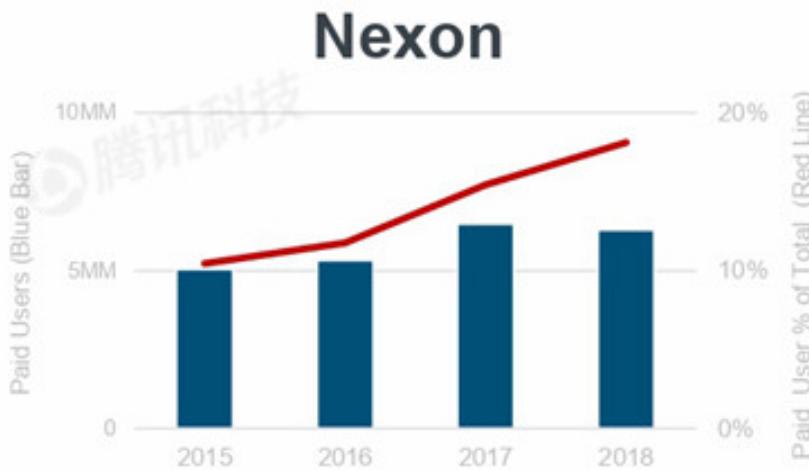
提升用户体验

EPIC公司“堡垒之夜”游戏的收入增长曲线，
根据尼尔森公司的SUPERDATA数据来源。



Source: Epic Games Releases (2017-2019) The Hollywood Reporter (3/19), Nielsen Superdata (6/18 +1/19)
Note: *Revenue growth estimate based on Superdata's 3rd party estimate of ~\$150MM in Epic Fortnite Revenue in
2017 & \$2.4B in 2018 revenue. Fortnite launched in September 2017.

免费增值游戏： 社交/移动/短时间



■ Paid Users — Paid % of Total Users
付费用户 — 付费用户在总用户的占比

Source: Nexon = Annual Company Filings. HearthStone = Activision Blizzard Filings + Morgan Stanley estimates. Zynga = Zynga Annual Reporting. Rovio = Rovio Annual Reporting. Note Paid users refers to users who upgrade to unlock premium features such as ad-free game play. Paid Users % of Total = share of payers in a period divided by total active users in the same period.

中文版制作: 腾讯科技

免费增值商业模式演进：

Freemium Business Model Evolution =

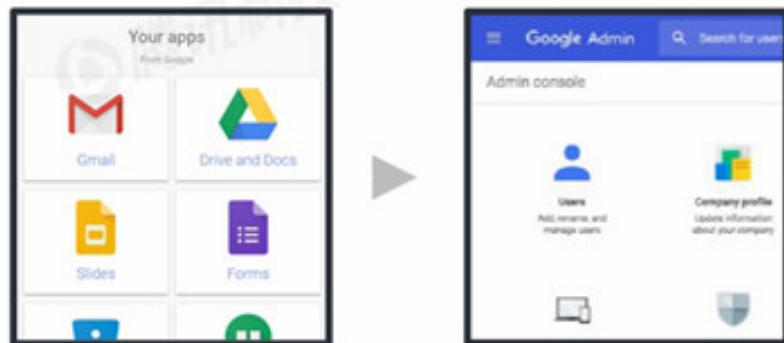
Gaming → Enterprise → Consumer

游戏——企业——消费者

免费增值模式企业（2006）： 谷歌G软件套件服务

免费

和其他人通信



谷歌许多成功的产品提供了魔力般的用户体验（而且是免费），
当我加入谷歌时，我希望能够让面向办公场所的谷歌G软件套件
服务同样具备优秀体验。

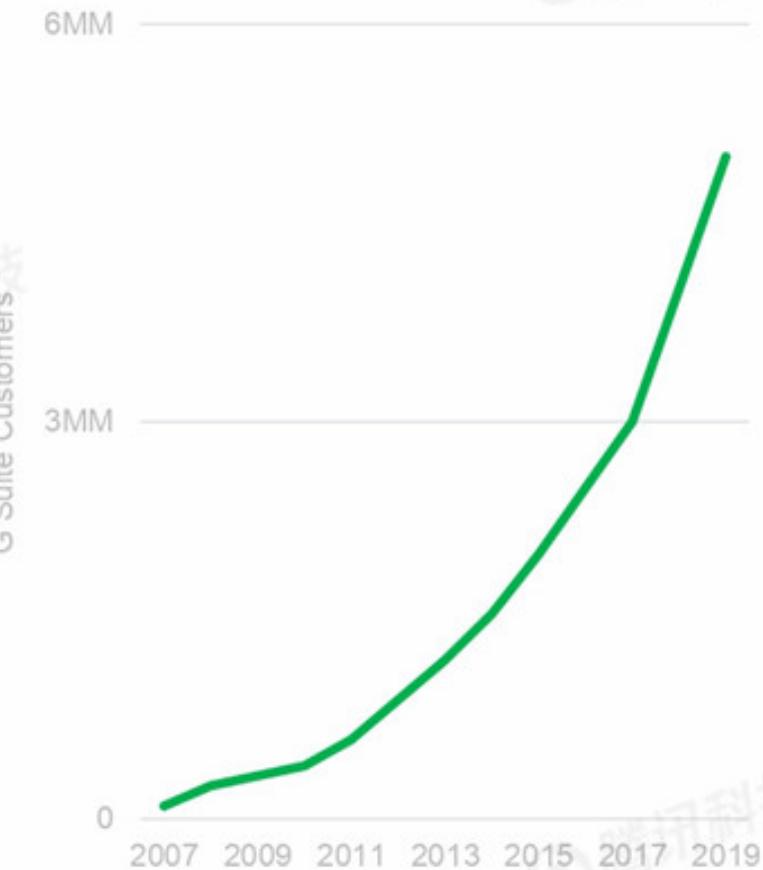
为了创造几十亿用户喜欢的免费产品，谷歌G套件团队在简单易用和设计性方面形成了某种纪律，我们准备把几十亿用户喜欢的用户体验带到工作场所，实际上你会看到工作中的人们希望获得这种体验。

PRABHAKAR PAGHAVAN——谷歌，负责技术的高级副总裁 7/18

增值模式

企业用户体验

付费用户

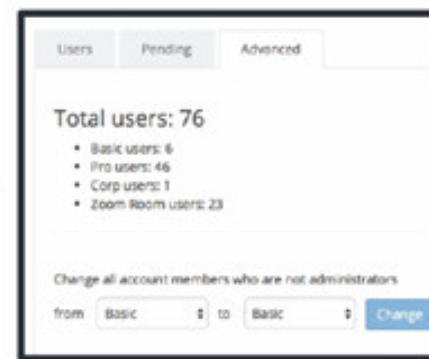
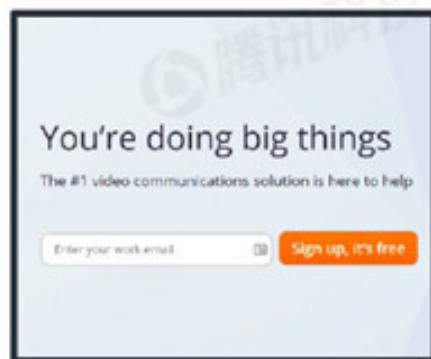


Source: Google Cloud Disclosures (2019) for G Suite Users. Google Next Conference for quote (7/18). Note: *Customers refers to the number of paying businesses using G Suite, not the number of paid users (e.g., one company with 10K employees would be counted as one customer. Google does not disclose the average G Suite customer size.)

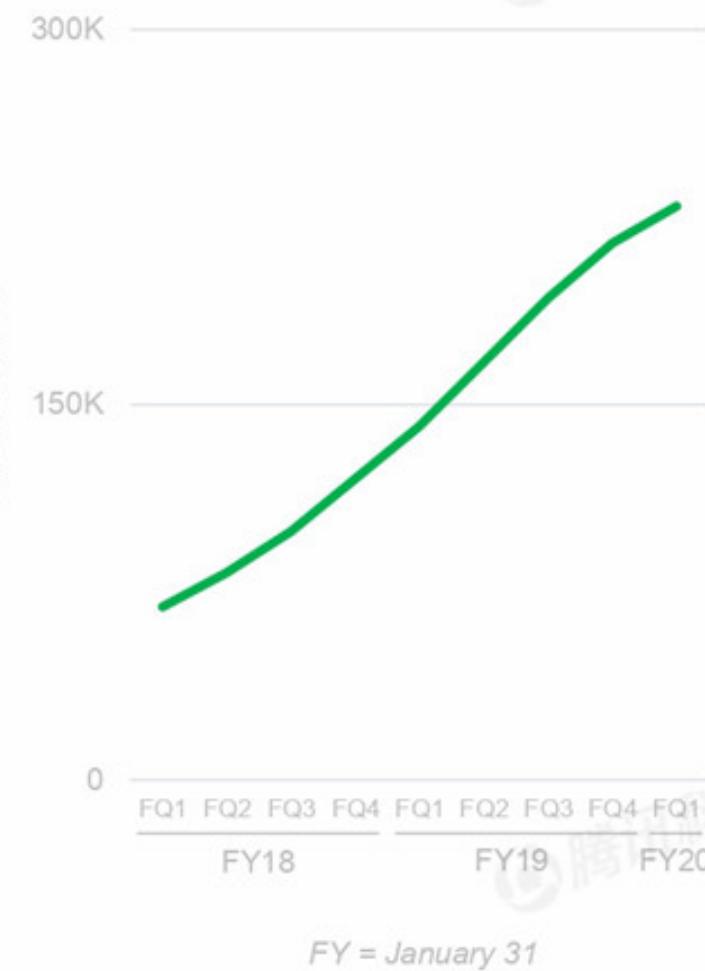
中文版制作: 腾讯科技

免费增值模式企业应用（2013）：Zoom

免费：和其他人沟通



付费：企业用户体验
付费用户



我们快速的增长源自于良好用户体验的良性循环

当一位同事或者助手邀请他们加入Zoom视频聊天时，
一个用户开始接触我们的平台

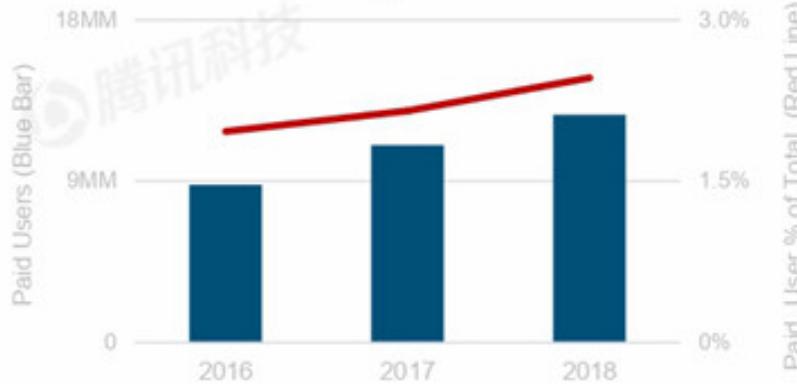
当参加视频聊天的人开始体验我们的平台，
并且发现了好处，他们开始变成付费用户，
解锁更多的服务功能。

Zoom 上市招股书S-1 3/19

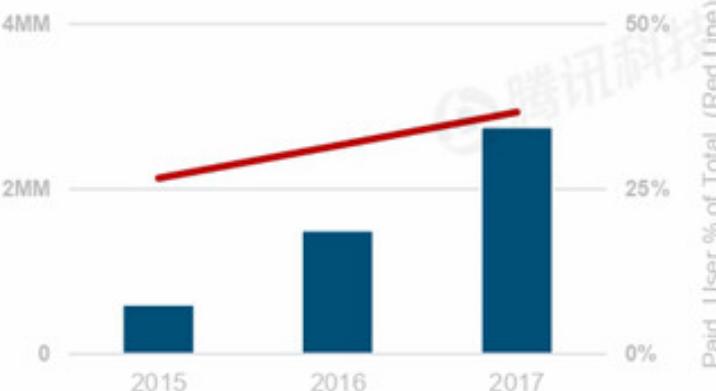
Source: Zoom. Note: *Goldman Sachs Investment Research estimate of Zoom Customers with 1-10 employees plus Zoom annual disclosure of customer counts.

免费增值模式企业应用： 协作/业务关键应用/包年模式

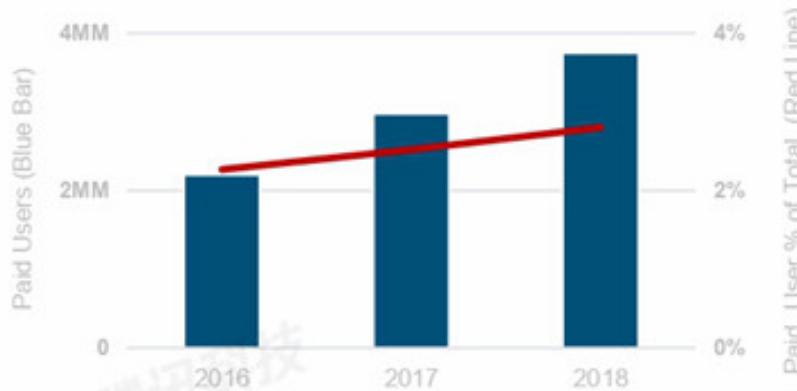
Dropbox



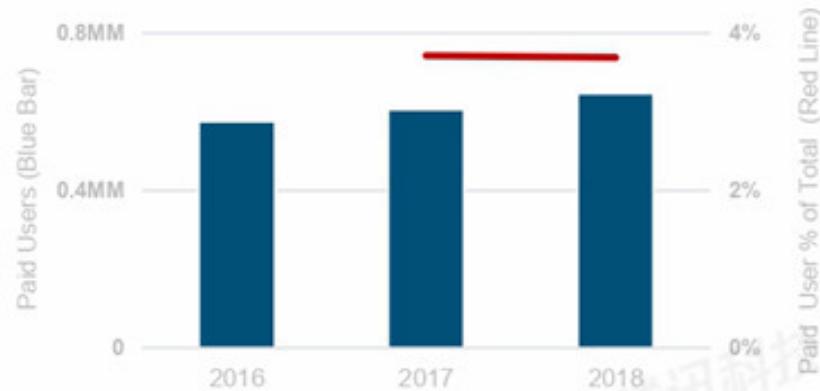
Slack



Wix



SurveyMonkey



■ Paid Users
付费用户
— Paid % of Total Users
付费用户在总用户占比

Source: Dropbox = Public releases & Goldman Sachs Investment Research estimates. Slack = Public press release (05/18), SurveyMonkey = Company releases. Wix = Company presentation (3/19). Wix total users represent those with an account. Note: Paid users refers to subscribers to premium products. Paid user % of total = share of payers in a period divided by total active users in the same period.

中文版制作: 腾讯科技

免费增值商业模式演进： *Freemium Business Model Evolution =*

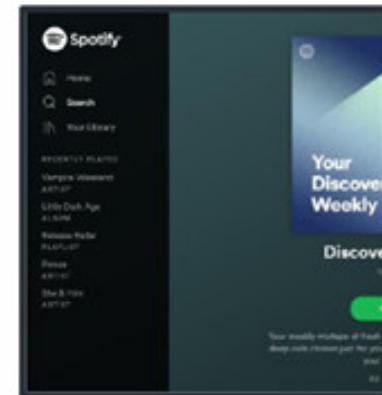
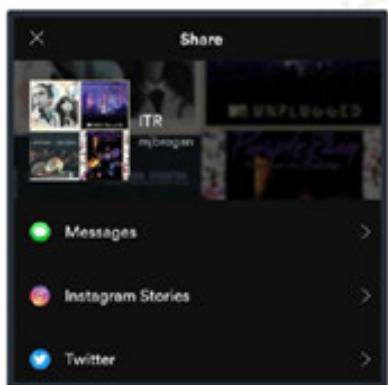
Gaming → Enterprise → Consumer

游戏 --> 企业 --> 消费者

免费增值模式消费者应用（2018）：SPOTIFY

免费

和其他人分享音乐和播放列表



SPOTIFY之所以获得成功是因为我们意识到全世界的音乐发烧友希望迅速以免费的方式获得全世界的音乐。

我们的用户会和朋友分享在SPOTIFY发现音乐的乐趣，这给我们的业务带来了令人难以置信的口碑。

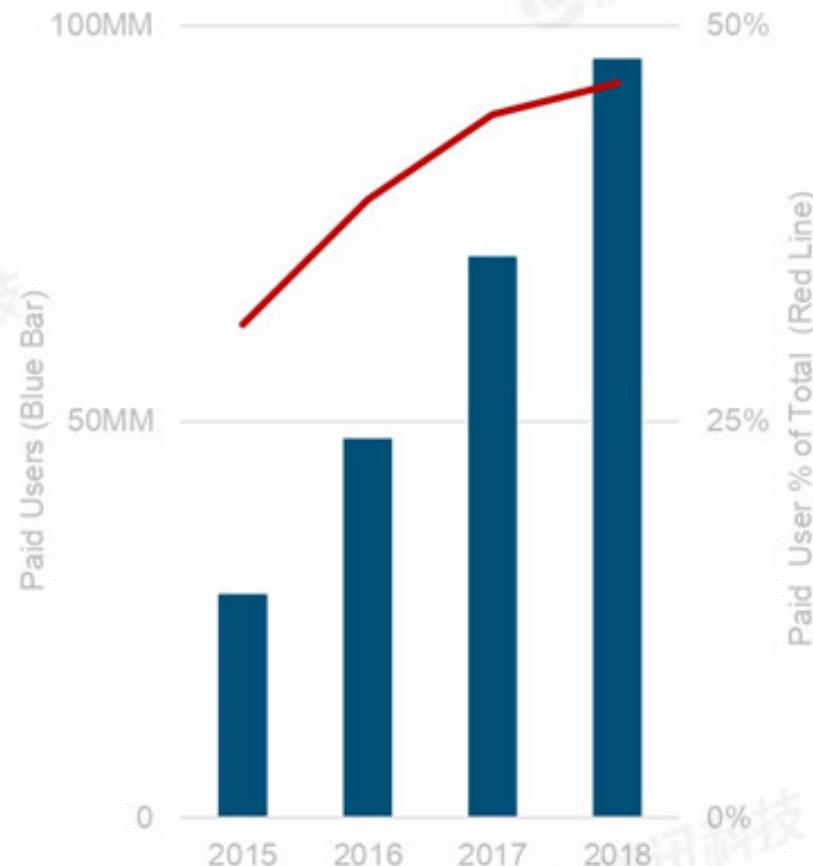
我们免费的产品驱动了付费会员的增长，这带来更好的个性化服务，并且推动了更具潜在终身服务价值的年轻用户的使用。

DANIEL EK——SPOTIFY公司创始人兼首席执行官 3/18

付费

会员用户体验

付费用户以及在总用户的占比

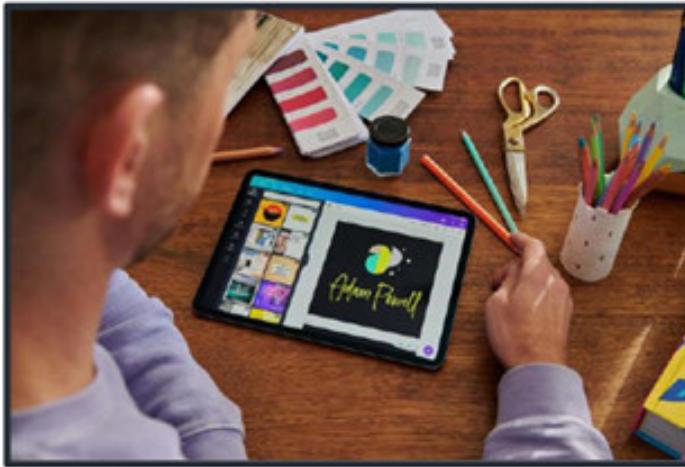


Source: Spotify Analyst Day Presentation (3/18). Spotify.

免费增值模式消费者应用：CANVA

免费

和其他人一起设计



我们希望全世界的所有人都能够参与设计，无论是你从事的是市场营销、销售，还是作为教师、学生。设计实际上在许多行业已经成为沟通思想的重要组成部分。

我们希望用户不被复杂的桌面设计工具所累，我们希望全世界所有人都能够创造优秀的设计作品，不仅看上去非常专业，而且能够让设计者深感自豪。

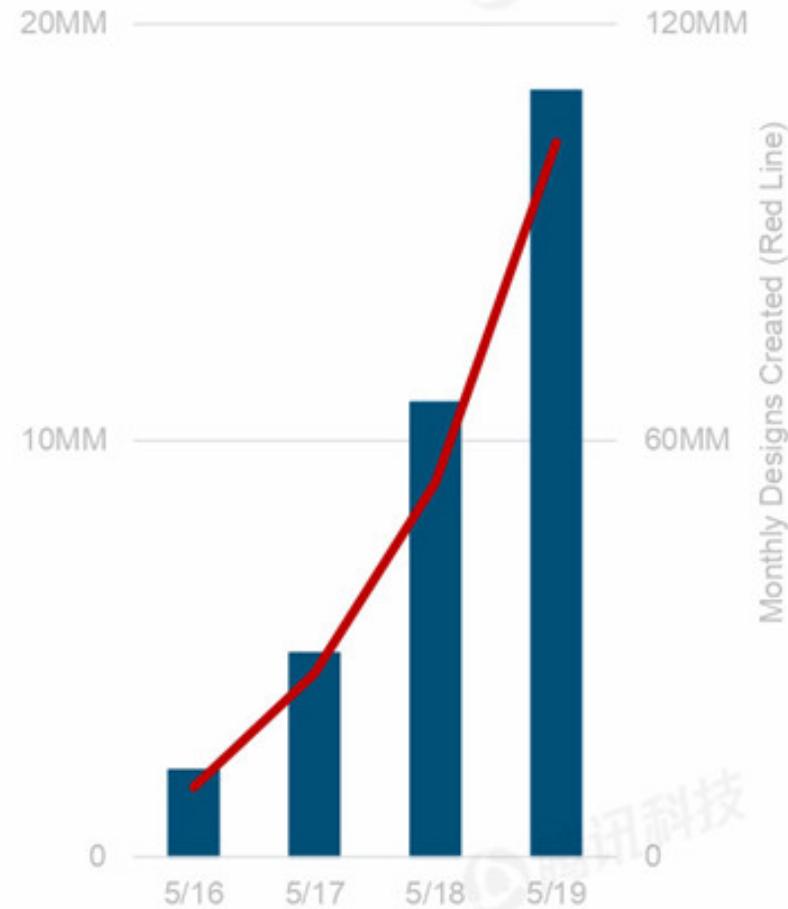
对于所有希望业务广泛发展的公司来说，在邀请用户付费之间首先提供优秀的使用价值，这是一个非常有用的战略。

MELANIE PERKINS : CANVA联合创始人兼首席执行官 6/19

付费

会员用户体验

月度活跃用户以及所创造的设计作品



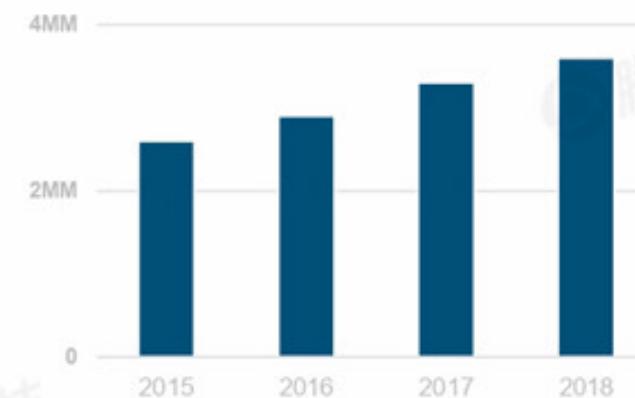
Source: Canva (6/19).

免费增值模式消费者应用： 个性化/高效/社交特色/包年模式

Amazon Prime



Twitch



Chegg



Cash App



Freemium Business Evolution =
免费增值商业模式演进：

从游戏开始，
在企业应用和消费者应用中
开始发展变化

大家趋之若鹜
但这种商业模式其实上才刚刚开始

免费增值模式商业模式： 才刚刚开始

一些纯玩免费增值模式模式的上市公司

Select Publicly Traded *Pure-Play Freemium Businesses**

>10MM Paid Subscribers (3/19)
超过1000万付费会员 (3/19)

Gaming 游戏	Epic Games (Private Company)	27MM**
Enterprise 企业	Dropbox	13MM
Consumer 消费者	Spotify	100MM

>\$1B Annual Revenue (2018)
年收入超过10亿美元 (2018年)

	\$1B+ Revenue 1st Year	Primary Monetization Drivers	
Gaming 游戏	Nexon King Digital Supercell Mixi Netmarble Epic Games (Private Company)	2011 2013 2014 2015 2016 2018	Paid Items / Ads / Subscriptions Paid Items / Ads / Subscriptions Paid Items / Subscriptions Paid Items Paid Items Paid Items / Subscriptions
Enterprise 企业	Dropbox	2017	Subscriptions
Consumer 消费者	Spotify Pandora Match Group	2014 2015 2016	Subscription / Ads Subscription / Ads Subscription / Ads

*Excluding China companies where Freemium business models are more mature owing to higher maturity of digital payments, particularly microtransaction companies (such as Apple / Amazon / Microsoft) owing to significant revenue contribution from non-freemium businesses / Includes private company Epic (only to scale). **Epic = Midpoint of 23-31MM estimate for Battle Pass subscribers per Timothy O'Shea @ Jeffries (3/19)...not confirmed by Epic Games. Source: CapitalIQ (including currency conversion) = Nexon / King (2018 Revenue as part of Activision) / Pandora / Mixi / Match Group / Dropbox / Netmarble. Spotify = Wall Street Journal / Company reports. Supercell = Venture Beat.

Freemium Business Model

Enabler =

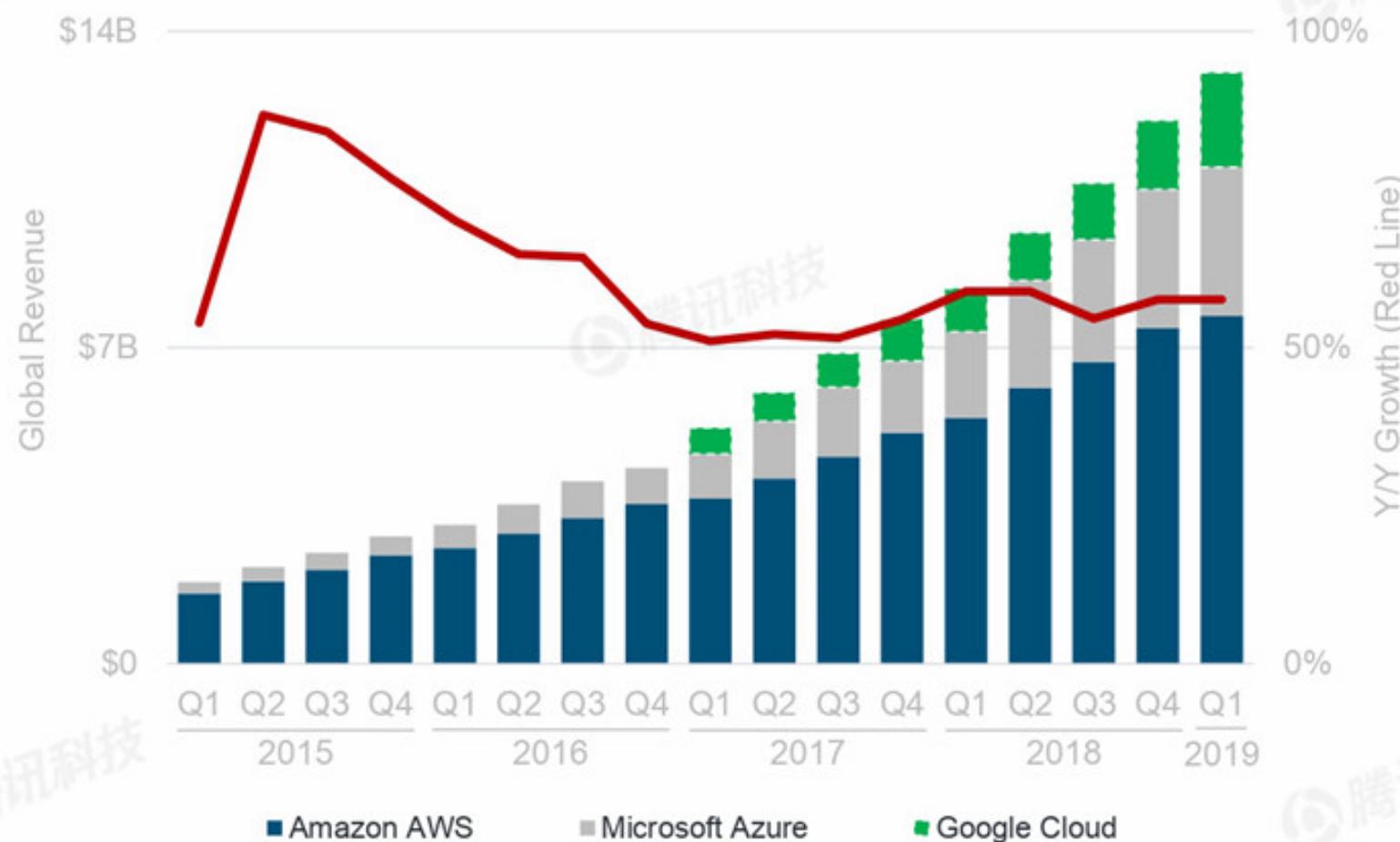
免费增值模式赋能者：

Cloud Deployment...

云计算部署

云计算部署：营收同比增长58%

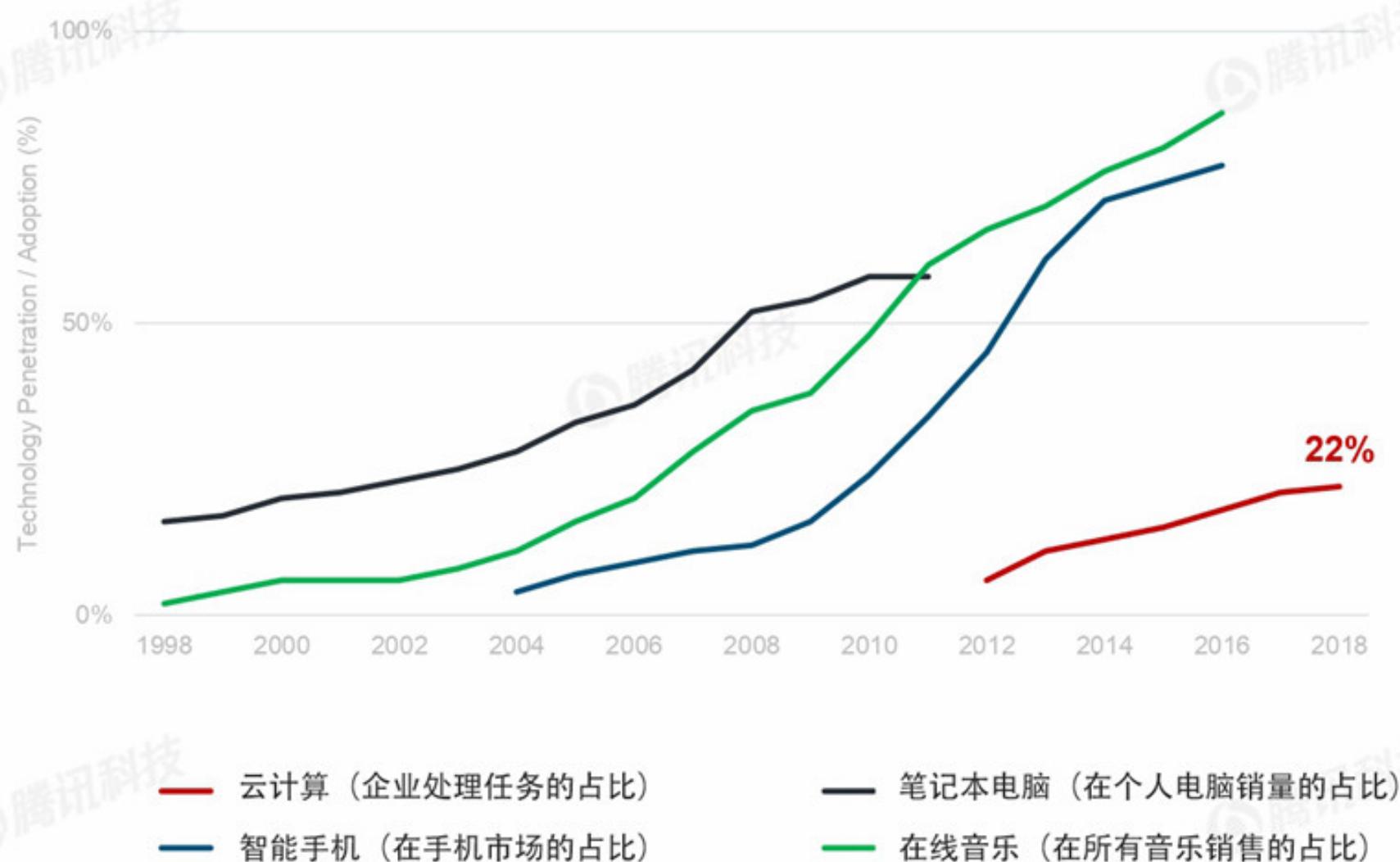
云计算服务总收入：亚马逊+微软+谷歌



Source: Amazon AWS = Company filings, Microsoft Azure = Keith Weiss @ Morgan Stanley (4/18), Google Cloud = Brian K. Morgan Stanley (5/18). Note: Google Cloud revenue based on MS annual estimate, applied to quarters using the seasonality trends on 2018. Google only included in 2019 growth rates owing to lack of estimates before 2018.

云计算部署：22%的企业处理任务 比五年前翻两倍

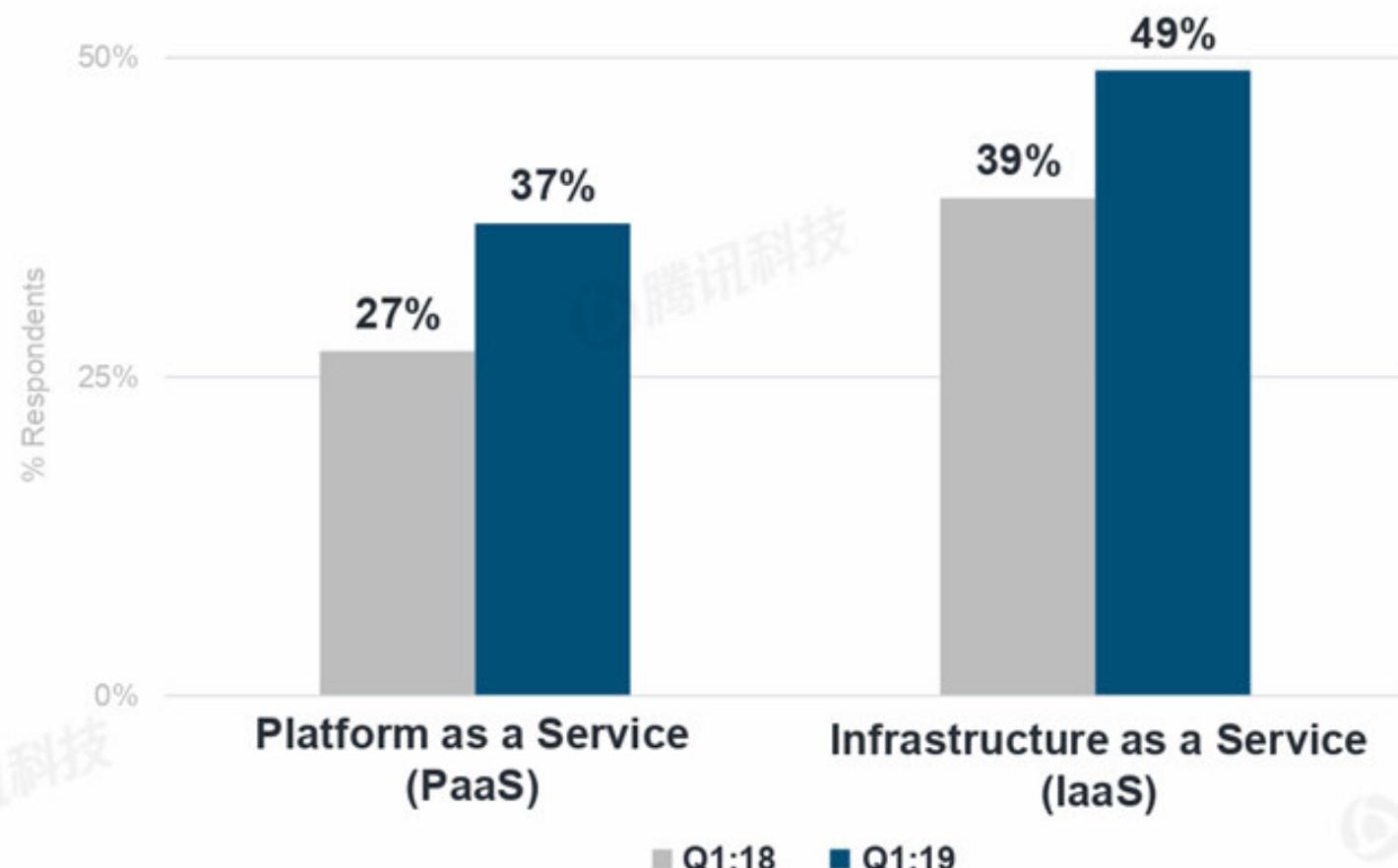
技术渗透率 全球市场,数据来源：摩根士丹利公司



Source: Morgan Stanley (5/18-3/19). Note: Estimate of Cloud workload penetration based on Morgan Stanley CIO survey in Q4 of each year.

云计算：兴趣渐浓

云计算使用普及率——CIO调查结果，美国和欧盟市场
数据来源：摩根士丹利公司



Source: Morgan Stanley Q1:19 CIO Survey. N= 100 USA / EU CIOs of major companies. Infrastructure as a service defined as cloud computing that uses virtualized resources in the cloud (i.e. processing, storage, etc.), but not software or other value add services. Platform as a service defined as cloud based hardware / software platforms, such as managed middleware.

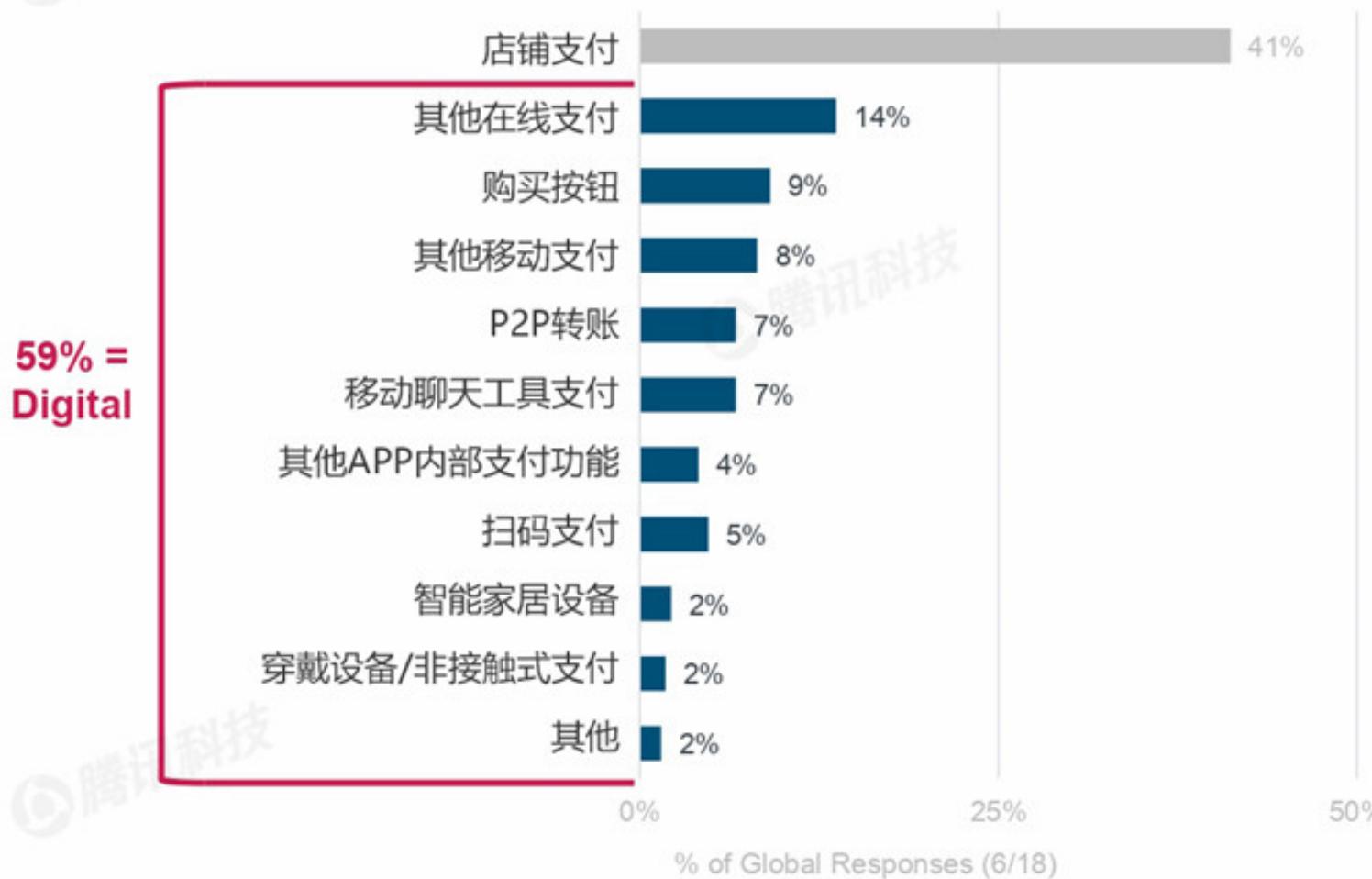
中文版制作: 腾讯科技

免费增值/会员模式赋能者： 高效的数字支付

数字支付：在日常支付的占比超过50%

不同支付渠道的交易规模

想想你过去十次的日常支付中，有多少是通过如下的渠道进行的呢？



Source: Visa Global Commerce Unbound 2018 (2/19). Note: Full question was: Please think about the payments you make for everyday living expenses, groceries, utilities, gas, food, etc., as well as for other things like a mortgage, or other larger, infrequent payments. Thinking of your past 10 everyday transactions, how many were made in each of the following ways? CRK Research conducted the survey with n = 8,127 across 20 countries (USA, Canada, UK, France, Poland, Germany, Sweden, Mexico, Brazil, Argentina, Colombia, Australia, China, India, Japan, South Korea, Russia, UAE, Kenya), between 5/31/18 – 6/29/18. All respondents do not work in Financial Services, Marketing, Marketing Research, Advertising, or Public Relations. own & currently use a smartphone, have a savings or checking account, own/use a computer or tablet, & own a credit or debit card.

数据增长：

迅速在全球改变万物运作之道

数据采集+分析+利用： 从“人类对人类”向“人类对计算机”演进



1995年前成功的企业： 利用人类数据，通过分析洞察来提升客户体验

产品开发（1890年代到1950年代）

IBM：海量人员采集的客户信息

销售团队+客户



IBM公司构建了一个销售团队，他们精通客户的业务，能够向客户介绍自身产品带来的优势。

客户和IBM员工深入交流，向他们解释IBM的制表设备（已经成为业务不可或缺的工具）还需要进行怎样的创新。

IBM的研发人员依赖于工程师和客户之间的沟通互动。

Jame Corada IBM公司“变化和持续性部门” 3/18

IBM 年营收

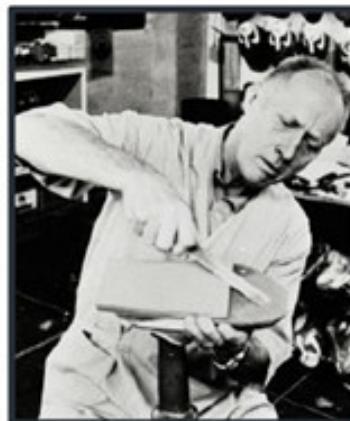
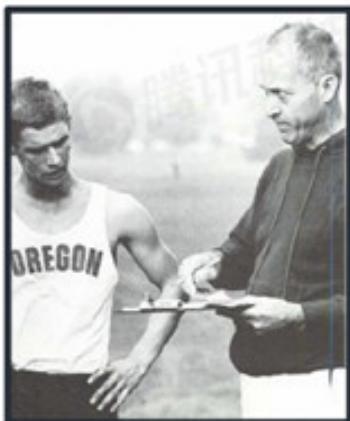


Source: IBM Revenue per IBM Online History Archives (Collected 2019). James W. Cortada's 'Change & Continuity' at IBM: Key Themes in IBM (Cambridge Press, Spring 2018 edition). Cimarron City Library Digital Archives. Note: Image contains a mixture of IBM sales people, engineers & customers gathered @ IBM Corporation School for collaborative working sessions. Photo taken 1951.

产品开发（1970年代）

耐克：员工/用户数据输入

员工/用户



我们所有的员工都是跑步爱好者，我们很了解消费者，员工和消费者其实是一样的。

我们需要了解跑步运动顶端的运动员，从技术
和设计的角度了解他们的需求，

我们的工程师和设计师花费很多时间和运动员沟
通，了解他们在功能和美学方面需要什么。

Phil Knight —— 耐克公司创始人 1992年7月

Nike
年营收



Source: Nike revenue from 1981 Nike Annual Report Quote: High-Performance Marketing: An Interview with Nike's Phil Knight (HBR July/August 1992)
Image: Nike. Note: Image Depicts Oregon Track Coach / Trainer Using Nike Shoes in Training & Improving New Models Using His Learnings.

中文版制作: 腾讯科技

产品开发 (1980年代)

克莱斯勒：聚焦性消费群体研究

聚焦群体



1978年在亚特兰大、丹佛、圣迭戈等城市进行的分析，表明了消费者需要怎样的小型货车产品。

他们需要能够停泊在标准车库中，一个开门宽度至少达到30英寸的车门，单排能坐三人，车厢内地板是平的，座椅可以拆卸，另外可以从货车的一侧从车内走到另外一侧。

David Zatz ——Hemmings杂志/Mopar Minivans 2/19

Chrysler 年营收



中文版制作: 腾讯科技

产品开发 (1980年代)

Intuite：全力关注客户试验

用户/易用性测试



Kwik-Chek User Testing @ Palo Alto Junior League
(Inside Intuit, Taken 1984)

我们在街上招募了一些人，
利用一个秒表测量他们使用Kwik-Check (Quicken)
软件的时间。在每一次测试之后，
程序员将会改进财务软件。

我们在1984年进行了可用性试验，
这比其他企业早了五年，
是否让市场营销人员为产品设计进行可用性测试存在很大差别，
另外是否让可用性测试成为工程师的核心同样存在很大差异。

Scott Cook Intuit公司联合创始人 9/03

Intuit公司 年营收



Source: Inside Intuit, Suzanne Taylor, 2003. Photo courtesy of Virginia Boyd as presented by Inside Intuit. Revenue as reported to the SEC for 1988-1990 & as reported to the SEC for 1993/1994. Intuit released its first revenue-generating product, Kwik-Chek in 1984.

中文版制作: 腾讯科技

...1990s-2000s...

Internet + Mobile Device + Cloud 互联网+移动设备+云计算

Netscape Web Browser – 1994

Amazon Web Services (AWS) – 2006

Apple iPhone – 2007

Apple App Store – 2008

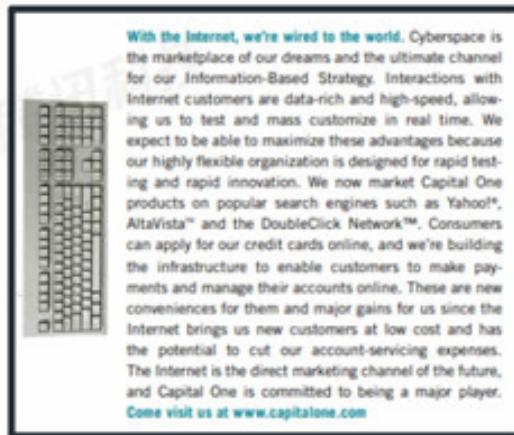
**1995年之后
成功的企业：**

**使用数字数据/用洞察分析
改善客户体验**

市场营销优化（1995年之后）

CAPITAL ONE：客户数据

数字信息捕捉



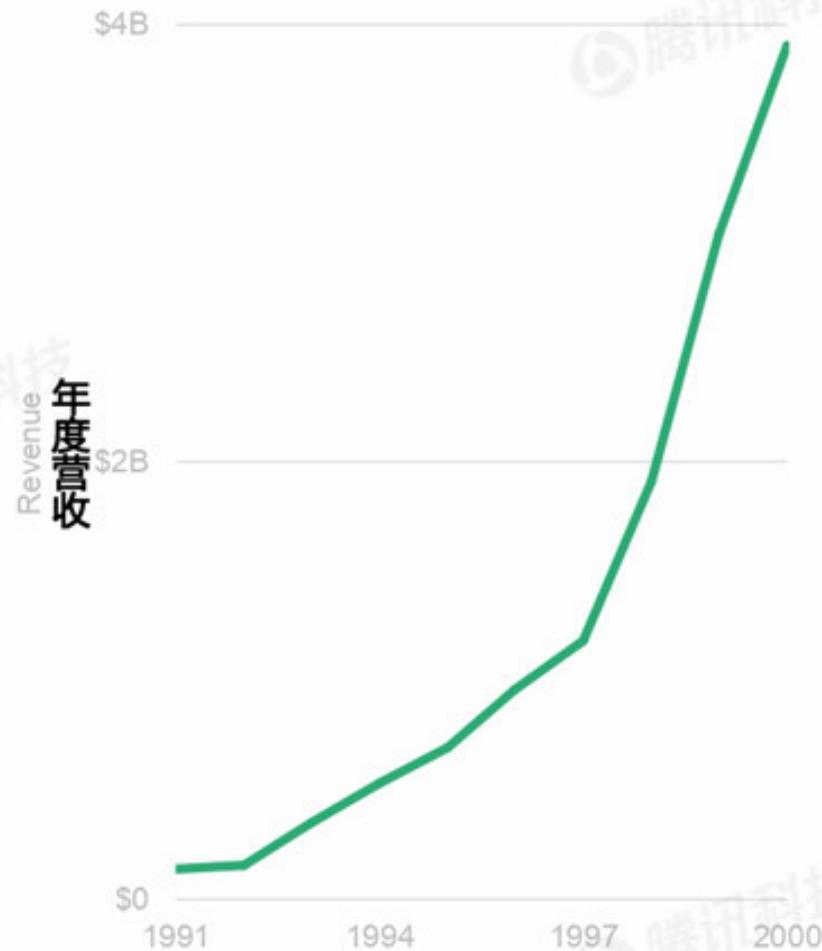
科技和信息的进步把信用卡行业转变为一个信息行业，从而能够对每一次客户交互和交易捕捉信息。

通过这些信息，我们可以进行科学试验，构建真实的消费者模型，从而对产品、定价、信贷规模、账户管理等进行调整，满足每一个客户的个性化需求。

通过这种数据分析，我们改变了曾经“单一产品打天下”的信用卡行业，成为美国发展最快的公司之一。

CAPITAL ONE年度报告 1996年

Capital One Annual Revenue CAPITAL ONE年度报告



Source: Capital One Revenue From CapitalQ (Collected 2019) Quote: 1996 Capital One Annual Report Image: 1998 Capital One Annual Report

中文版制作: 腾讯科技

用户体验+销售优化（1995年之后）

亚马逊：客户数据

Real-Time Digital Information Capture 实时数字信息捕捉



这是互联网发展的早期，
也是亚马逊网站的起步阶段

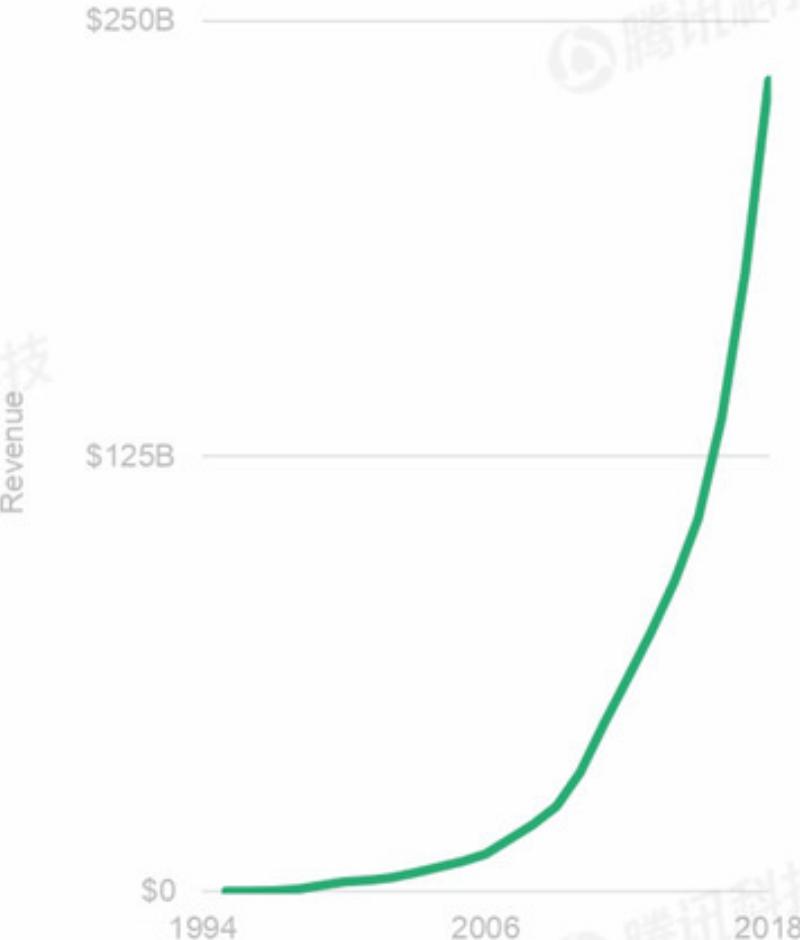
今天，电子商务给消费者节省了金钱和时间，明天，通过个性化服务，电子商务将会加快消费者发现产品和服务的速度。

亚马逊网站通过互联网为客户创造真正的价值，通过这种手段，
亚马逊希望树立百年品牌。

今天，我们把重点放在了改善购物体验上，我们现在提供大量的
用户评价、内容、浏览选项以及商品推荐功能。

亚马逊年度报告，1997年

Amazon Annual Revenue



Source: Amazon Revenue from CapitalQ (Collected 2019) Quote: 1997 Amazon Annual Report Image: Amazon.com / Bond

中文版制作: 腾讯科技

2000年代的成功企业：

构建、使用数据分析工具

使用数字数据和洞察分析
来改善客户体验

数字分析工具： 实时帮助企业

采集数据

- 理解客户需求、改进业务流程
- 增加客户输入/提升产品
- 管理直接客户/会员关系
- 改进客户决策过程

管理联系

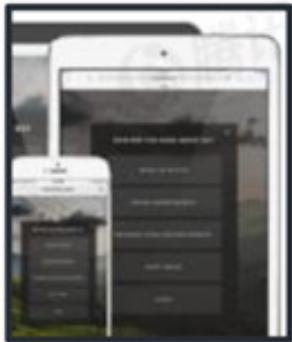
- 管理内部和外部沟通
- 通过多种渠道和客户沟通
- 在IT系统中组织客户数据

优化数据

- 提升数据分析/推荐/个性化
- 回应大规模的客户事件
- 培养商业洞察力+优化订单交付
- 管理数据增长/消除低效率

QUALTRICS + FABFITFUN：采集数据 来理解客户需求，改进业务流程

Qualtrics = Experience Management QUALTRICS：经验管理



世界的所有组织都需要采集经验数据，缩小两种体验之间的巨大差距，即他们认为自己所交付的用户体验以及实际在内部或者外部实际发生的体验。

通过QUALTRICS采集经验数据可以让公司进行实时调整，适应快速变化的外部环境。这可以让公司消除和客户之间的体验差距，并且让员工能够更高效工作，服务好客户。

RYAN SMITH QUALTRICS公司
联合创始人 6/19

Qualtrics Revenue



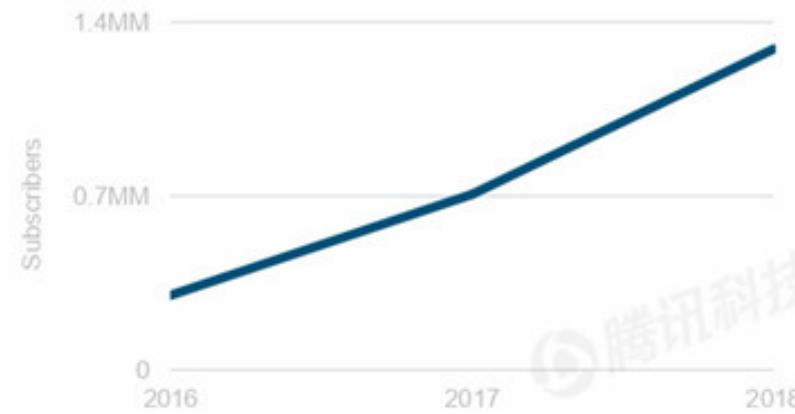
FabFitFun = Community Input FABFITFUN：社区信息来源



我们一直在从我们的会员实时了解反馈信息，以更好了解他们喜欢的产品和趋势，以及他们感兴趣的组成部分和配方，以及让他们和FABFITFUN品牌和社区保持连接的产品类型。围绕消费者产品和品牌态度，我们聚合了数以百万计的数据点，可以让我们准确预报个性化产品的满意度，并且在深度了解和改进的会员体验之间实现良性循环。

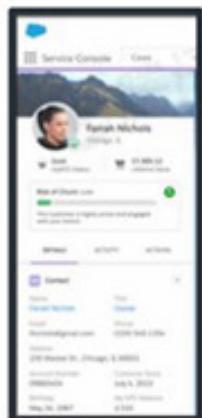
DANIEL BROUKHIM FABFITFUN
联合创始人兼联合首席执行官 6/19

FabFitFun Subscribers



Salesforce+阿迪达斯：采集数据增加客户输入/提升产品

Salesforce：客户交互



随着所有的公司改变他们和客户的关系，他们实际上正在变革他们销售产品、服务客户、以及营销、创新的方式。

他们正在以全新的方式连接他们的客户，他们正在构建客户的全新的360度视角，利用各种新工具来实现更加快速、更加掌握情况的决策，Salesforce成为这场变革的核心力量。

Marc Benioff Salesforce 联合创始人兼
联合首席执行官 8/18

阿迪达斯：客户再造



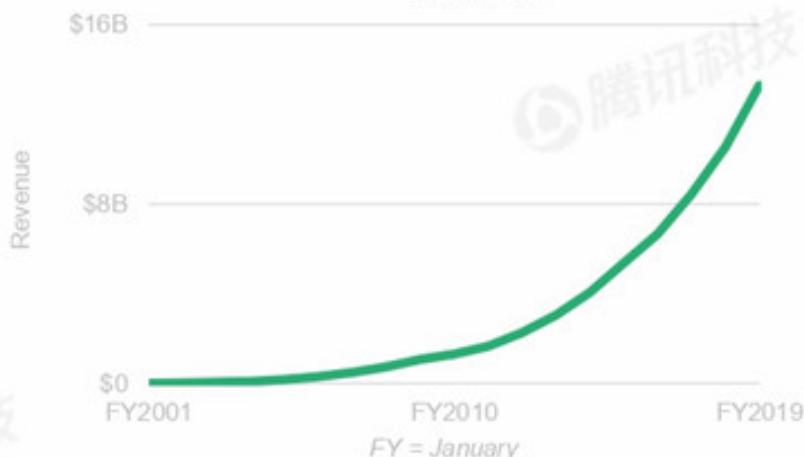
我们需要迅速回应客户的期望，阿迪达斯和Salesforce之间的关系让我们在产品设计上更加主动，阿迪达斯推出新产品以及影响趋势的能力是令人吃惊的。

我们通过Salesforce和客户建立的直接联系让上述变化一夜之间发生。

Kasper Rorsted 阿迪达斯首席执行官
6/18

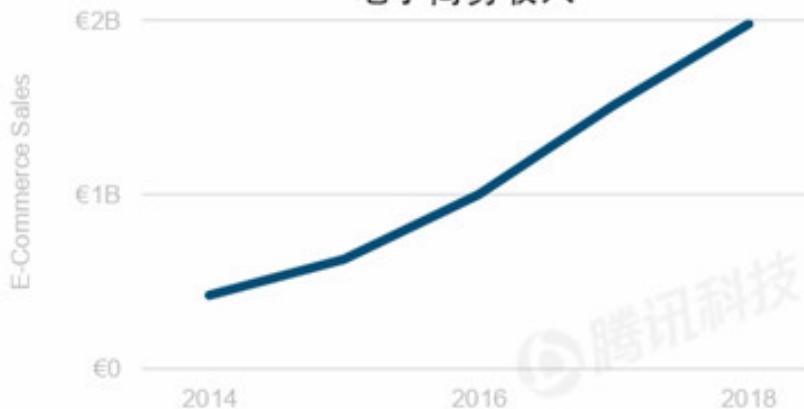
Salesforce

年度营收



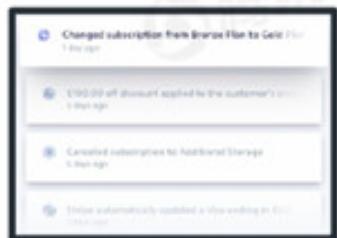
Adidas

电子商务收入



Stripe+Slack :采集数据 直接管理客户或会员关系

Stripe: 交易管理



最具创新的公司正在和他们的客户建立长期关系，当这些企业努力发现最佳的定价和销售战略的时候，他们受到了现有支付结算系统的束缚。

除了简单的会员管理之外，企业客户需要更多的功能。通过来自于许多企业客户的反馈，我们开发了Stripe结算系统，给快速发展的公司提供了围绕客户体验设计结算功能的能力。

Noah Pepper: Stripe负责工程技术和产品管理的高管。4/18

Slack:高效的用户结算

Slack公司推进推出了“公平结算政策”，这赢得了我们许多客户的称赞。



他们将会在推特进行介绍，向朋友们谈论，他们将会对我们感到很满意，他们更有可能对会员续费，他们有很正面的印象。

这个正面的印象，显然造成了巨大的差异。

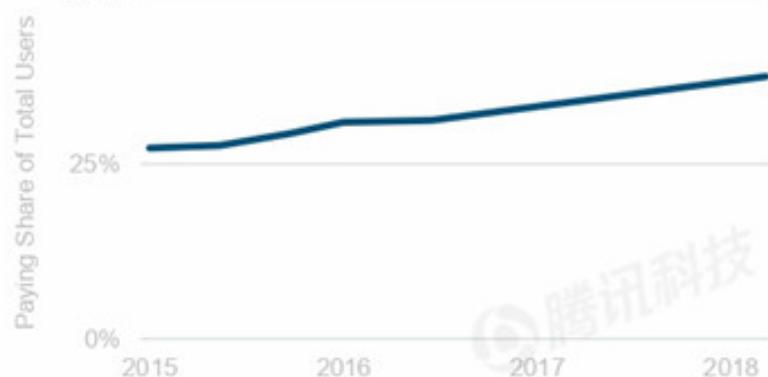
Stewart Butterfield 创始人兼首席执行官 Slack 7/15

Stripe
结算规模



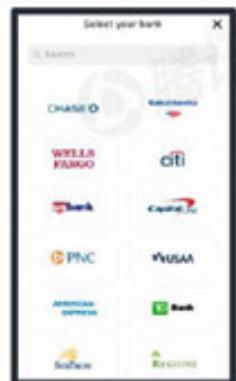
Slack

支付用户的份额



Plaid+Betterment：采集数据 改进消费者决策过程

Plaid：金融数据获取



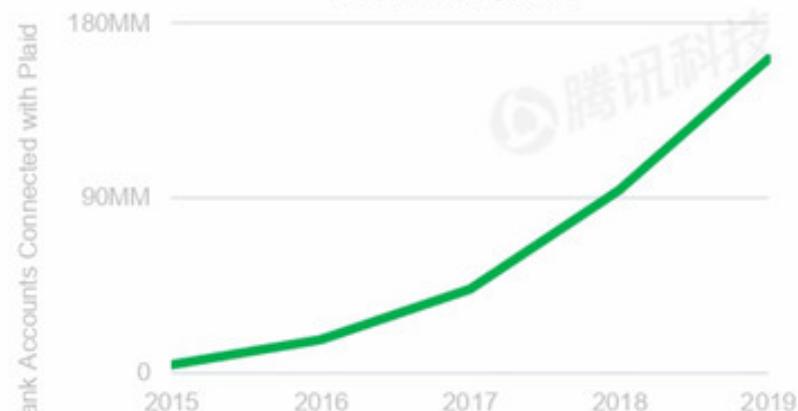
In the past, financial services were organized geographically – a bank would serve a local population & offer whatever services it thought that area needed – which often meant many consumers were underserved.

Today, a new class of user-centric financial services companies are emerging that use data to tailor their services to the specific needs of individual consumers.

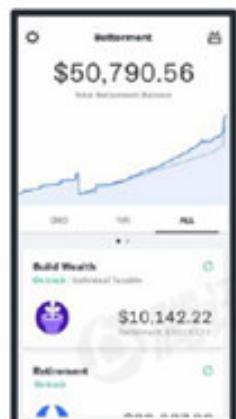
Our goal at Plaid is to build the infrastructure that enables consumers to easily & securely share their financial data with any financial services app that helps them live healthier financial lives.

Zach Perret – Plaid, Co-Founder / CEO, 6/19

Plaid 连接的银行账户



Betterment：自动化金融管理



Emotions drive human behavior, especially when it comes to money – people often engage in sub-optimal behaviors like trying to time the market.

Delivering high quality automated financial advice in real-time at scale requires access to consumers' financial data. We're able to use data from Plaid and other sources to deliver personalized, low-cost financial advice to more than 450,000 customers.

Jon Stein – Betterment, CEO, 6/19

Betterment 所管理的资产



Slack+HelloFresh：管理联系 优化内部和外部沟通

Slack：沟通渠道



*What Google is doing for the web,
we're trying to structure by channel.*

**Team-first, organization-first approach to
messages as opposed to individual first.**

*As individual productivity increases, it's the handoff
between people that gets more complicated.
The talking to other people is the actual work.*

Stewart Butterfield – Slack, Founder / CEO, 5/18



HelloFresh：辅导反馈



**HelloFresh uses Slack bots to
monitor social media.**

*Whenever someone mentions HelloFresh,
the bot pushes these notices into a Slack
channel. They're similarly alerted whenever
they get a review of their app on the
Apple Store or Google Play.*

HelloFresh – 9/17

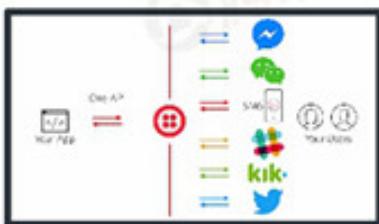


Source: Slack Public Press Releases, Stewart Butterfield Interview With Inc. (5/18), Slack Public Case Study, Twitter (4/19), Hello Fresh Annual Report (2018).

中文版制作: 腾讯科技

Twilio+Shopify：管理联系 通过多种管道和客户沟通

Twilio：客户沟通



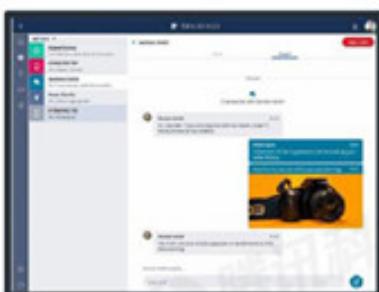
15 years ago, talking to customers meant you had a phone number & customers could call it.

Now, you've got text messaging, chat, mobile apps with push notifications, WeChat, WhatsApp, Facebook Messenger.

We want to provide one system that allows companies to keep up with this rapidly changing landscape & constantly iterating on those customer experiences with easy to use tools & infrastructure that they don't have to worry about scaling.

Jeff Lawson – Twilio, Founder / CEO. 11/17

Shopify：多渠道对话



We want to create an easy experience for our customers...we want to establish trust & form a human relationship with our customers [merchants] when they reach out for support on our platform.

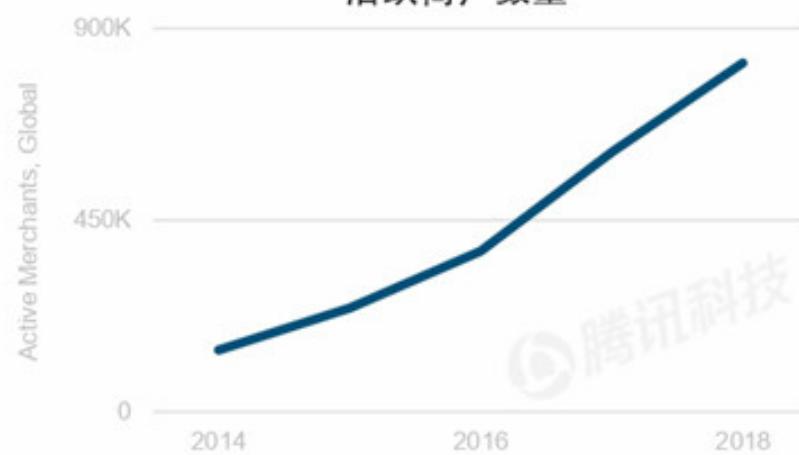
It is essential to give our team the tools to cultivate those relationships from anywhere in the world on the channels that our customers want to use.

Chris Wilson – Shopify, Merchant Operations, 11/18

Twilio
客户规模



Shopify
活跃商户数量



Source: Twilio Releases / Case Study (11/18). Jeff Lawson interview with BlogGeek.me (11/17).
Shopify active merchants per Brian Essex @ Morgan Stanley.

Segment+Meredith：管理联系 在IT系统中组织客户数据

Segment：客户数据基础设施



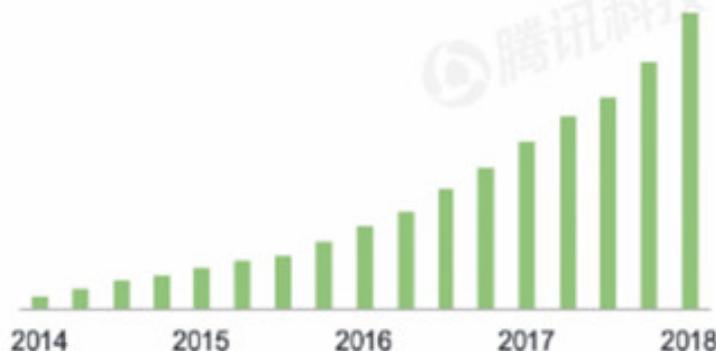
Today's customers expect highly relevant, contextualized experiences wherever they interact with a business. However, this is an extremely difficult technology problem to solve.

Businesses are interacting with customers across dozens of digital channels, leading to a tangled mess of data that is siloed throughout their organization.

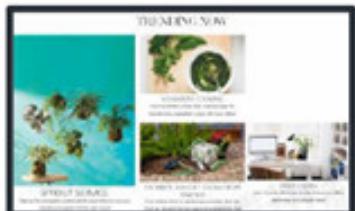
Customer Data Infrastructure solves this problem.
It allows companies to collect, manage & easily route their first-party data to whichever application requires it, ensuring customer experiences are consistent and relevant.

Peter Reinhardt – Segment, Co-Founder / CEO, 6/19

Segment 年度收入



Meredith：内容推荐



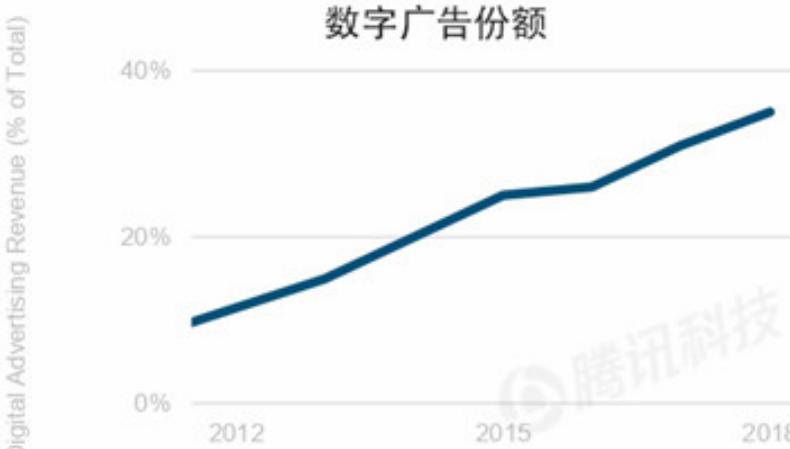
Segment has enabled us to streamline the customer data capture process, while maintaining flexibility to customize for each of our 36+ magazine brands as needed.

Before adopting Segment, we were spending far too much money on disjointed analytics & we had no way to look at the entire network at scale...

We now look across the entire organization to make sure we're best serving all of these groups.

Grace Preaypongisan & Kerry-Anne Doyle –
Meredith, Business Intelligence, 1/18

Meredith 数字广告份额



Source: Segment, Peter Reinhardt Blog Post (9/18). Segment Release (2018) Meredith Annual Reports (2012-2018). Note: Meredith digital advertising revenue includes digital advertising and digital circulation.

Snowflake+Instacart：优化数据 提升分析/推荐/个性化

Snowflake：广泛的数据获取

There's a lot of value in business data, but most companies struggle to extract that value.

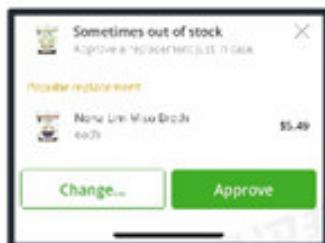


The issue is with existing technology. The list of challenges we hear from our customers is consistent: Data is segregated into separate silos, significant energy goes into managing infrastructure, concurrency & resource limitations get in the way of business needs & overall the tools are hard to work with.

Snowflake's unique architecture solves these problems being built from the ground up to leverage the scale, performance & elasticity of the cloud.

Frank Slootman – Snowflake, CEO, 6/19

Instacart：产品更迭

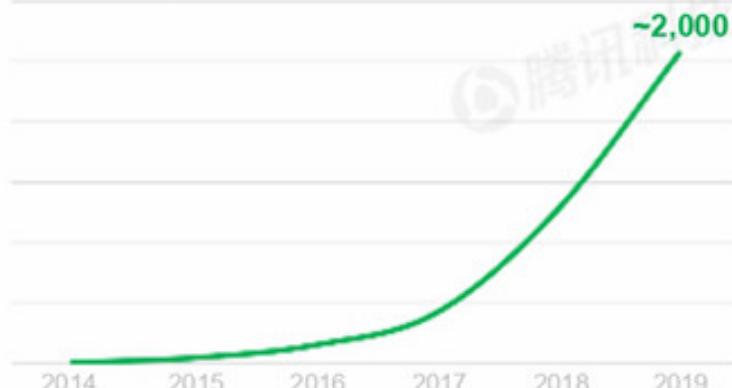


Every time an Instacart shopper scans an item into their cart or marks an item as "not found," we get information that helps us make granular predictions of an item's in-store availability. This helps us recommend appropriate replacements for items likely to be out-of-stock.

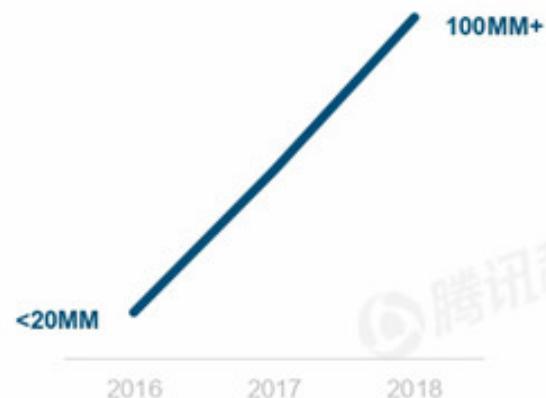
Among other improvements, performing complicated feature engineering in our Snowflake data warehouse instead of python, this new [item replacement] tool, which scores 15x more items than previous tools, was built with 1/5 of the resources in 1/4 of the time.

Instacart – 12/18

Snowflake 月度活跃用户



Instacart 覆盖的家庭规模



Source: Snowflake (5/19). Instacart (12/18).

Confluent+Accor: 优化数据 回应大规模客户事件

Confluent: 数据/事件/回应

Companies are still running on tech from batch-process era, yet their customers expect experiences with real-time, contextual information.

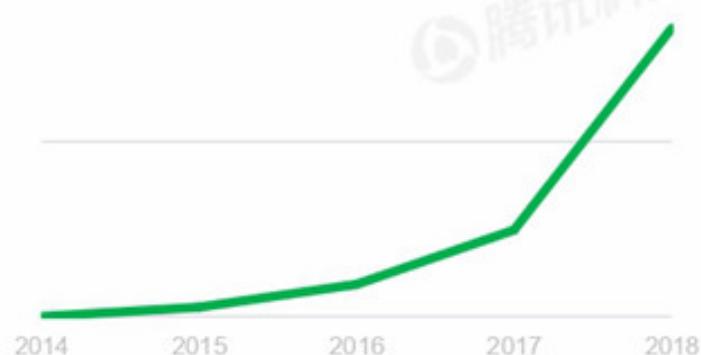


Companies are now re-architecting their businesses around real-time data with a new kind of data infrastructure called event streaming platforms.

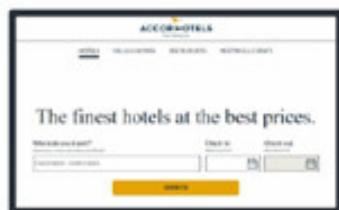
With Confluent, companies can connect all of their systems & power applications with live data sources. Now, they can engage their customers based on real-time events.

Jay Kreps – Confluent, CEO, 6/19

Confluent 年度订单规模



Accor: 获取请求处理



Accor's augmented hospitality offerings include 4,800 hotels, resorts, & residences across 100 countries.

As part of a shift to a more connected, real-time future, Confluent is helping simplify & transform the booking lifecycle, connecting the data & event streams that are triggered the second a customer clicks 'book,' from processing the payment & fraud detection to adding dietary requirements & room preferences from previous bookings.

Julien Ramakichenin – VP Distributed & Intelligent Systems, Accor, 6/19

Accor 月度请求数量



Source: Confluent (6/19), Accor (6/19)

Looker+Farfetch：优化数据 培养商业洞察力+优化订单交付

Looker：商业情报



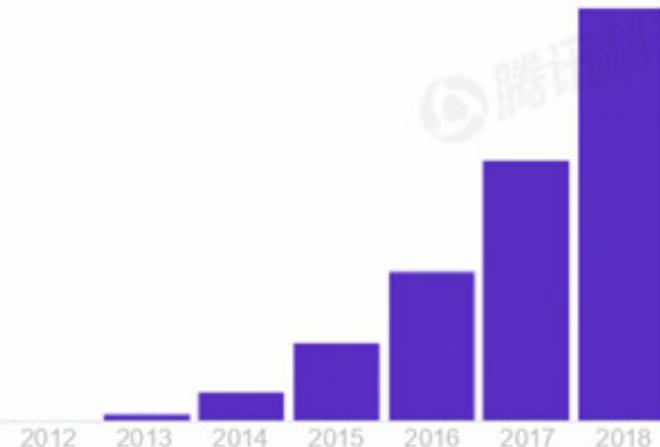
Looker helps companies better understand all the data they have & I think this has been a holy grail for a long time.

Companies want to be data-driven. They want their employees to be able to ask questions & get factual answers.

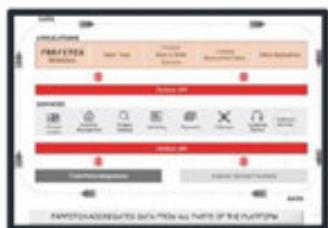
When we started out, companies didn't understand the lifetime value of their customers completely, & there was this chaos going – we wanted to bring data into the reach of any company so it could use it more effectively.

Frank Bien – Looker, President & CEO, 8/18

Looker 客户规模



FarFetch：优化订单交付



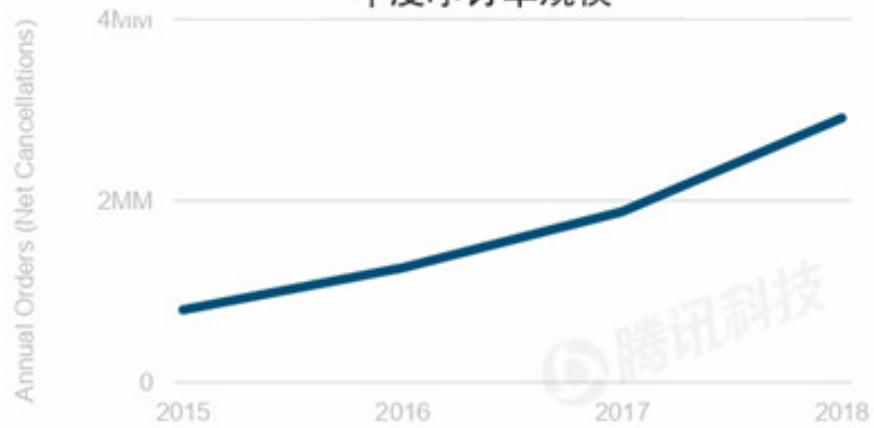
In luxury fashion, there is often a mismatch between supply & demand... Emerging brands typically have no route to the global market & their distribution is limited.

Farfetch has more supply / demand data than anyone else in the luxury fashion industry & is now supplementing it with even more market data.

Over time, Farfetch will turn that data into strategic commercial insights to form the basis of advisory for the fashion industry (starting with the luxury brands) through the development of a disruptive insights platform.

Farfetch – 3/19

FarFetch 年度净订单规模



Source: Looker (6/19) San Jose Mercury News (8/18). Farfetch release (3/19).

UiPatch+Sumimoto Mitsui: 优化数据 管理数据增长 以及消除低效率

UiPatch：数据驱动的流程自动化



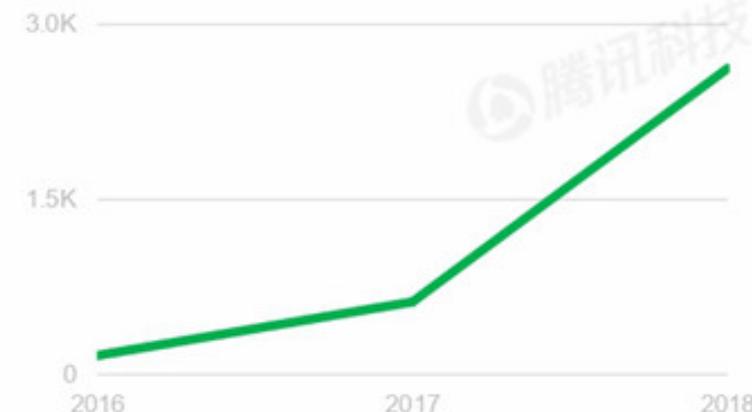
UiPath Computer
Vision Training

...[Robotic Process Automation's (RPA)] benefits compound as employees are freed from the burden of routine, monotonous manual work, enabling them to focus on high-value tasks such as improving customer service, enabling front-line staff to retrieve more data at a faster rate & enhancing every aspect, from the booking experience to customer service support.

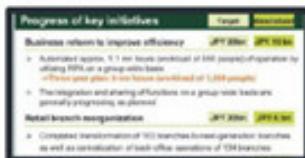
This leads to greater employee satisfaction & more productive staff who deliver better customer service experience & positive feedback from customers.

Daniel Dines – UiPath, Founder / CEO, 4/18

UiPath
客户规模



Sumitomo Mitsui：增加支持能力



Our key areas of RPA implementation include – information gathering processes used to enhance sales & planning capabilities (customer transaction / industry data) & supporting branch operations (customer performance reports / mortgage loan brochures).

The anticipated 3MM person-hours of productivity to be generated over the next 3 years [by using RPA] will be used to expand value-add operations, like enhancement of sales capacity through improved customer proposals.

Sumitomo Mitsui Financial Group

Sumitomo Mitsui
数字客户覆盖率



Source: UiPath. Daniel Dines interview with Aviation & Defense Universe (4/18). Sumitomo Mitsui Banking Corporation press release annual report (5/18). Digital penetration defined as share of customers using any digital channel to conduct banking operations.

中文版制作: 腾讯科技

数字客户覆盖率

采集数据

- 理解客户需求、改进业务流程
- 增加客户输入/提升产品
- 管理直接客户/会员关系
- 改进客户决策过程

管理联系

- 管理内部和外部沟通
- 通过多种渠道和客户沟通
- 在IT系统中组织客户数据

优化数据

- 提升数据分析/推荐/个性化
- 回应大规模的客户事件
- 培养商业洞察力+优化订单交付
- 管理数据增长/消除低效率

今天对于人类工作而言，数据至关重要，
最成功的公司已经聪明地把数据整合到了每个员工的工作流中。
数据就是新的应用软件。

Frank Bien Looker公司首席执行官兼总裁 6/19

数据/人工智能

如果正确使用 能够提升客户满意度

零售客户满意度：数据和个性化能够带来提升

零售业客户调查

91%的客户青睐能够提供个性化商品或者推荐的品牌

83%的客户愿意被动分享个人数据，以换取个性化体验

74%的客户愿意主动分享个人数据，以换取个性化体验

Accenture (Global*)

全世界的人们呼吁按照欧盟《通用数据保护法》的模式进行综合性
个人隐私监管，我同意。

新规则应该保护你选择如何使用个人信息的权利，
与此同时让公司为了安全或者提供服务的目的使用个人信息。

马克·扎克伯格 Facebook联合创始人兼首席执行官 3/19

数据量 + 利用率 =
快速 / 广泛演变

数据量=非同寻常的增长……

~13%的数据具有结构性/被标注，数据增长迅速

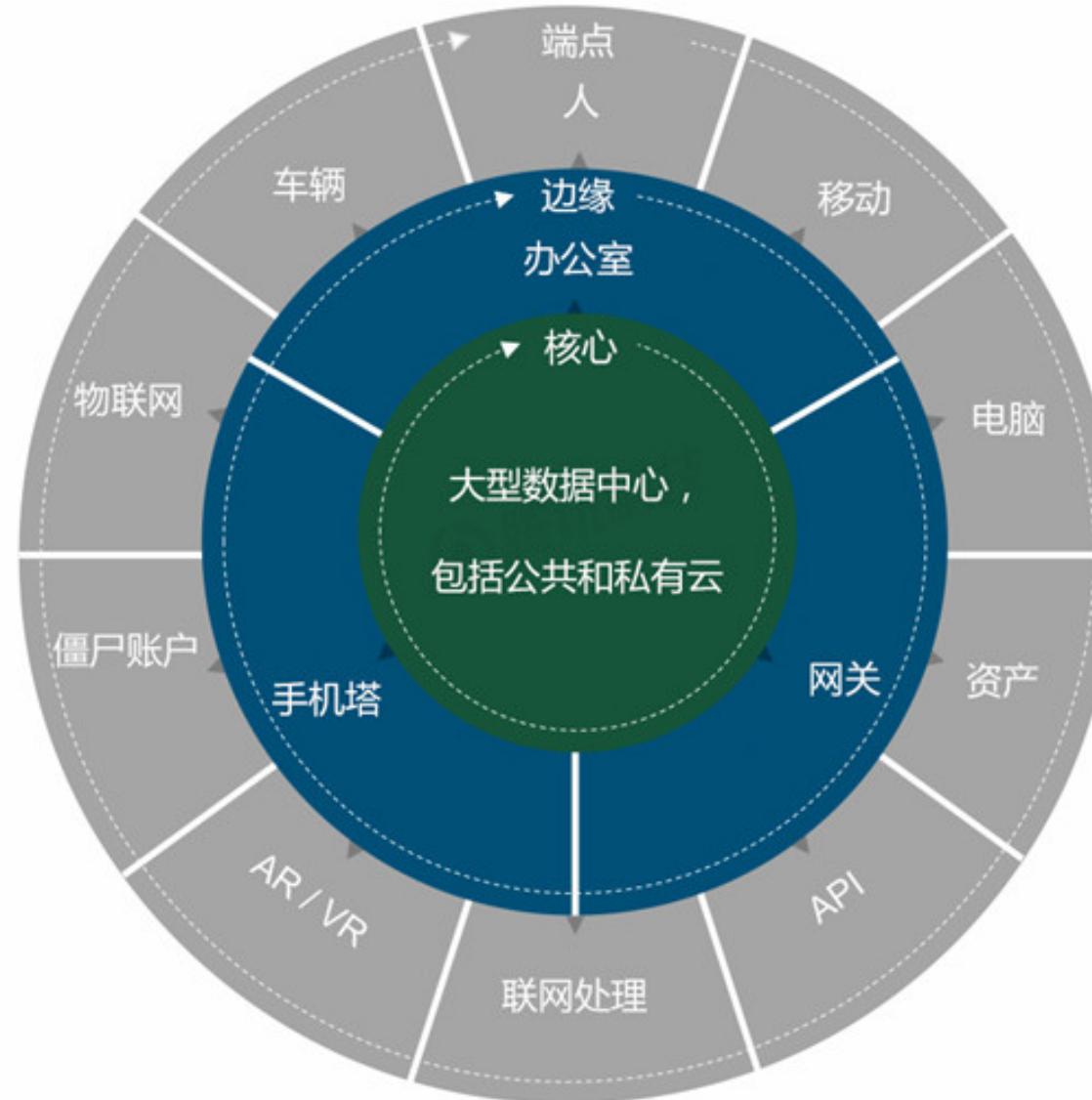
根据IDC捕获/创建/复制的新数据



Source: IDC 'Digitization of the World From Edge to Core White Paper' developed in collaboration with Seagate (11/18), IDC DataSphere
1 petabyte = 1MM gigabytes, 1 zeta byte = 1MM petabytes of new data created / captured each year. The grey area in the graph represents data generated, not stored. Structured data indicates data that has been organized so that it is easily searchable & includes metadata & machine-to-machine (M2M) data. Replicated data = data that is a copy of the original..

中文版制作: 腾讯科技

数据传播=数据扩展.....
端点?边缘?核心

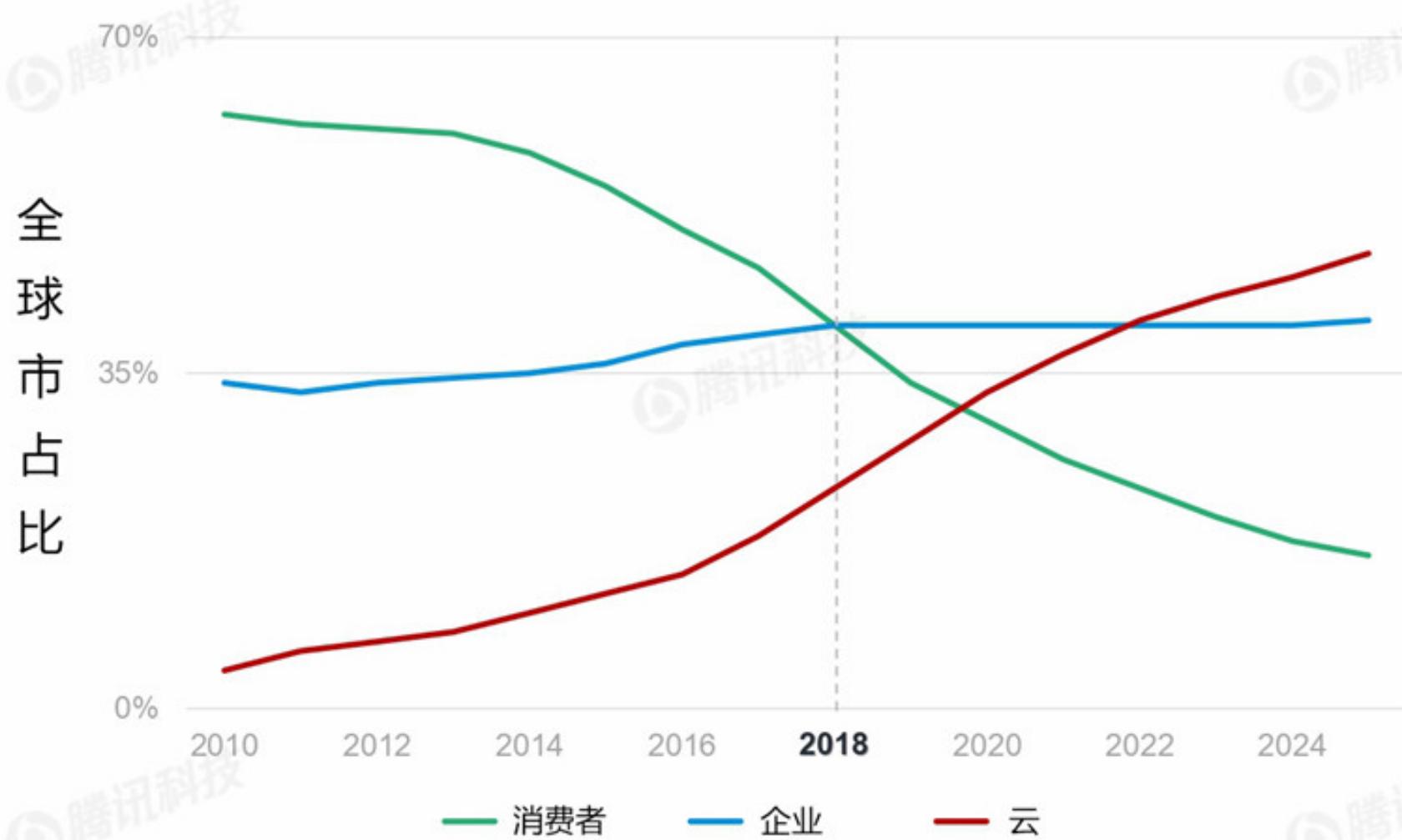


Source: Adapted from Graphics presented in IDC 'Digitization of the World From Edge to Core White Paper' developed in collaboration with Seagate.

中文版制作: 腾讯科技

数据管理=不断演变……
企业演变速度超过消费者……云服务超过两者

根据IDC由经理存储的数据

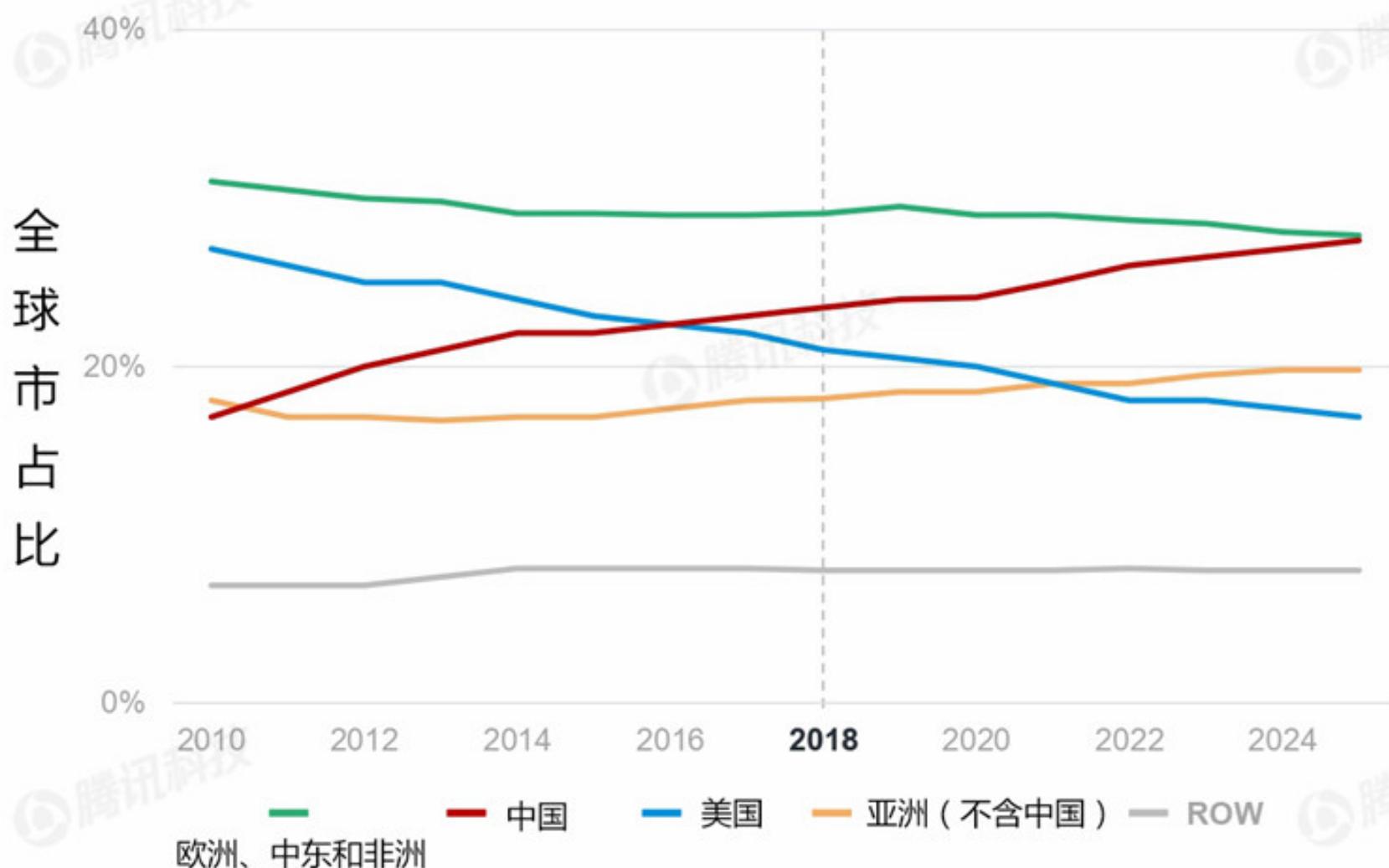


Source: IDC 'Digitization of the World From Edge to Core White Paper' developed in collaboration with Seagate (11/18), IDC Data
Note: Consumer refers to devices owned by end users, such as smartphones, computers, external hard drives, etc. Enterprise refers to data
stored by businesses, often in on-premise data centers. Public cloud refers to services such as Amazon Web Services, Microsoft Azure,
Google Cloud, etc. Note: 2018 = last full year before release of report. 2019-2025 are estimated from current trends.

中文版制作: 腾讯科技

数据量共享=欧洲、中东和非洲领先……
其次是快速崛起的中国……美国沦陷

根据IDC捕获/创建/复制的新数据



Source: IDC 'Digitization of the World From Edge to Core White Paper' developed in collaboration with Seagate (11/18). IDC notes that China's Data captured / created / replicated will grow 30% annually for next 7 years owing to more Internet users creating more data in China & China's above average usage of video surveillance – video is by far the most data-intensive type of data commonly captured / created / replicated today. EMEA's datasphere is the largest in the world today owing, in part, to their mature use of video surveillance technology. Note: EMEA = Europe, Middle East & Africa. ROW = Rest of World. Note: 2018 = last full year before release of report. 2019-2025 are estimated from current trends.

中文版制作: 腾讯科技

数据驱动的世界将永远打开，总是跟踪，总是监视，
总是在听，总是在看，因为它永远是在学习。

我们所认为的随机性将局限于基于复杂人工智能算法的正态分布模式，这种算法将以新的和个性化的方式呈现未来。
人工智能将推动更多的自动化进入商业领域&动态信息处理和互动。
这将提供新的效率和产品，从而实现企业追求的结果和客户的个人偏好。
如今，公司正在利用数据改善客户体验，开拓新市场，提高员工和流程的效率，创造新的竞争优势.....

传统的模式将被重新定义(如车辆或大型家用电器所有权)，伦理、道德和社会规范将受到挑战。

David Reinsel / John Gantz / John Rydning – IDC, *The Digitization of the World – From Edge to Core*, 11/18

数据量+利用率…… 技术变革与人的适应性

人类适应技术变革的能力正在增强，

但是仍然跟不上科学和技术革新的速度。

为了克服由此产生的摩擦，人类可以通过发展新的技能来适应，

例如能让人们更快学习、迭代和试验的技能。

对于致力于保护公众利益的政策制定者和管理者来说，

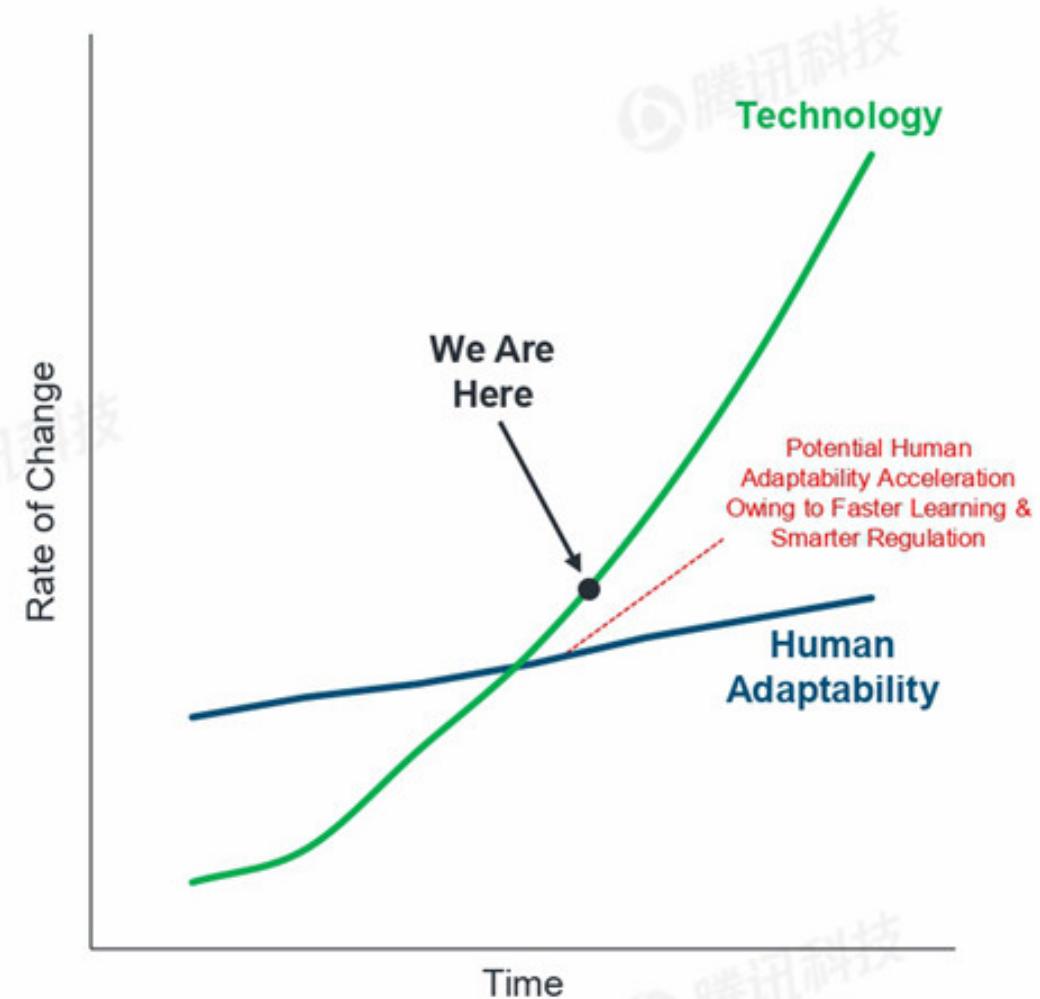
发展这些技能尤其重要。他们需要。

准备尝试新的方法、迭代以及与时俱进，

从而让科技进步符合公众利益。

Astro Teller – X, The Moonshot Factory

Adapted from Thomas Friedman's *Thank You For Being Late*, 2016



消费者+企业+监管机构=越来越多地从数据消防软管中喝水



Source: The Canadian Press

互联网使用 =
有问题.....但也有益处

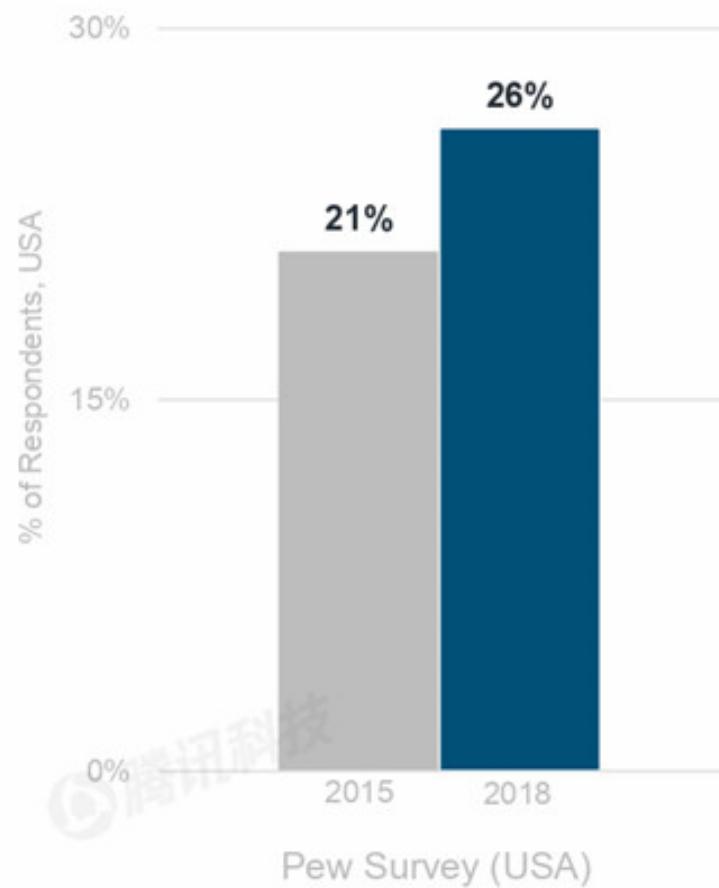
使用问题 =
负载过大.....

成年人“几乎一直”在线=

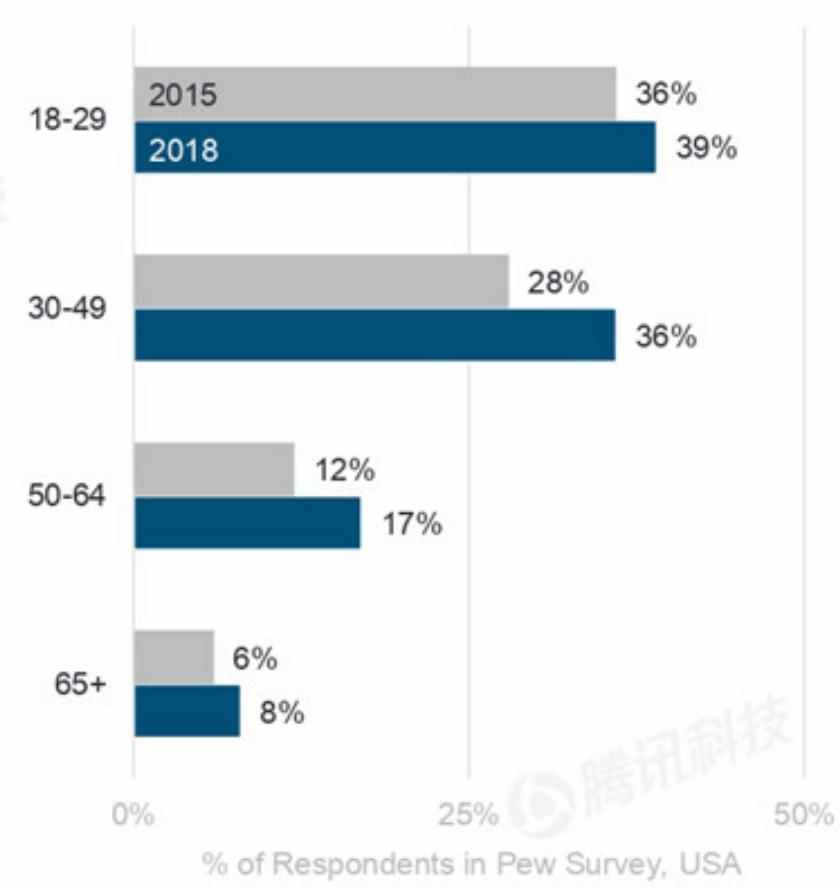
26% VS 三年前的21%

“几乎一直” 在线的成年人占比

整体而言



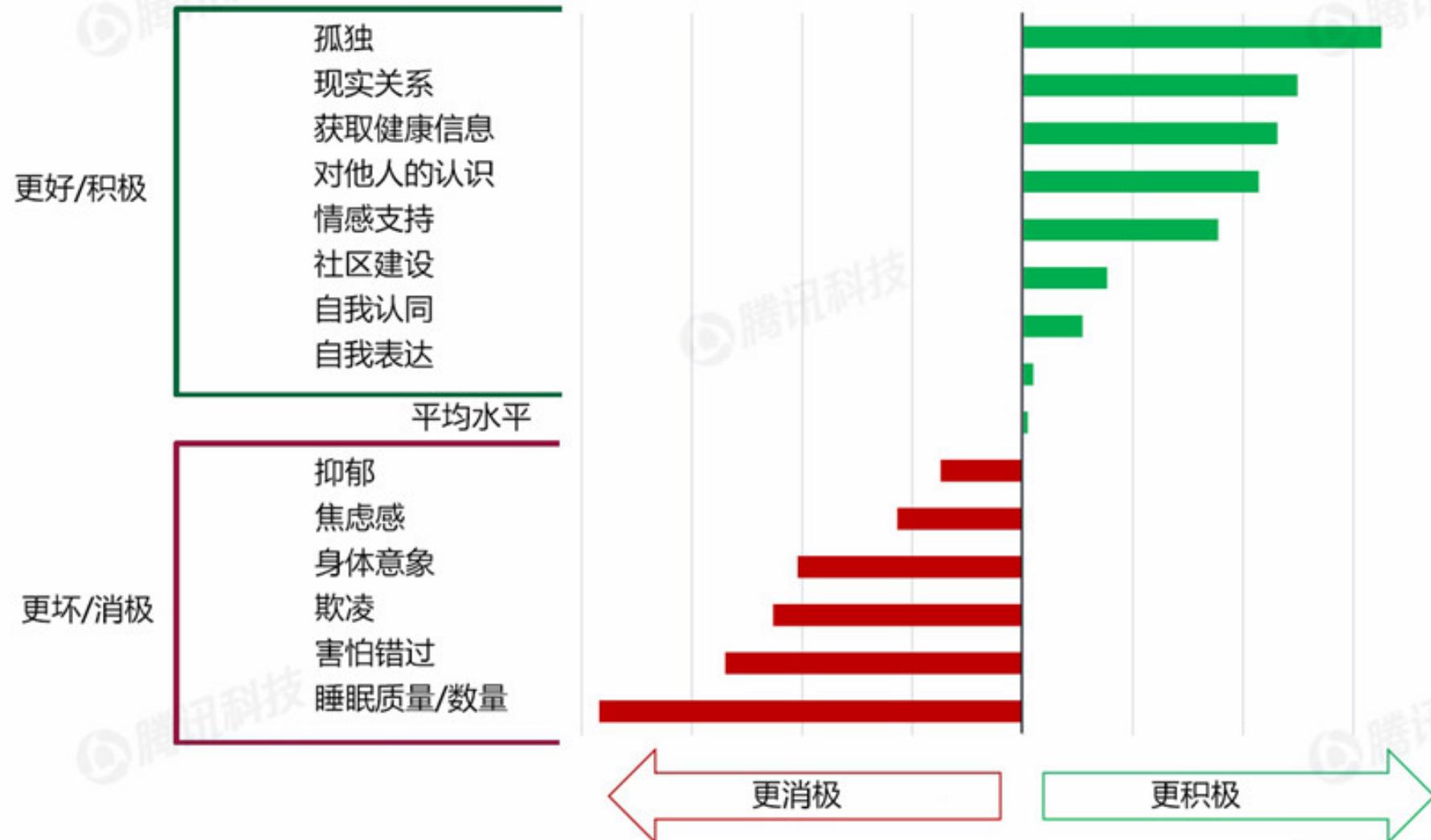
根据不同年龄段



Source: Pew Research (7/15 + 1/18)

社交媒体=积极和消极

你使用的社交媒体平台使得这些健康相关因素变得更好还是更坏？

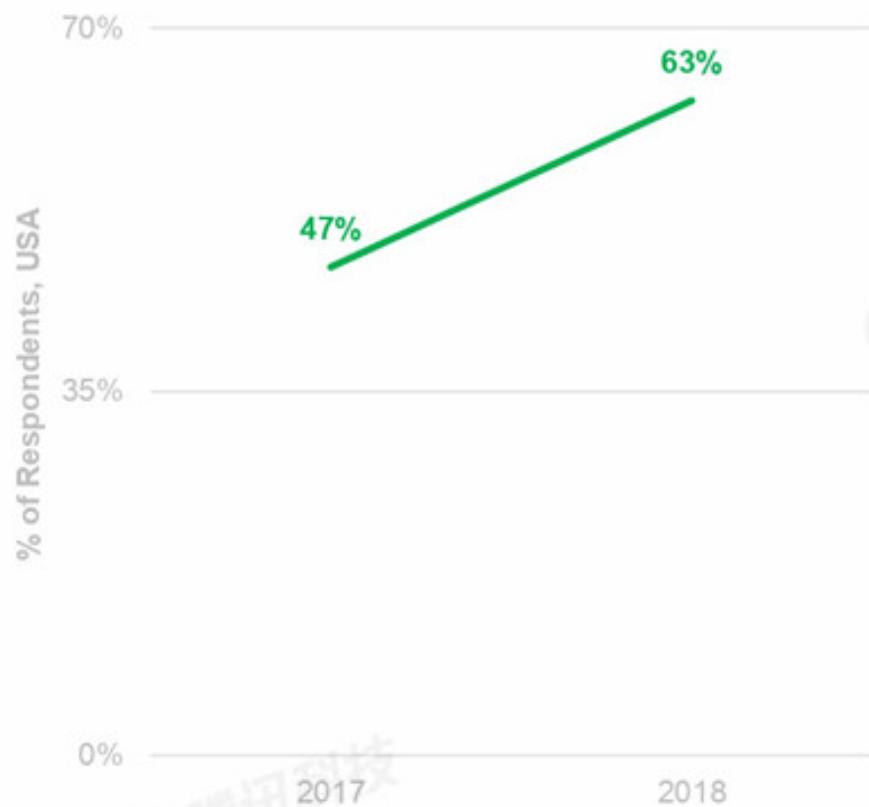


Source: Royal Society For Public Health Survey of 1,479 British teens in 'early-2017'. Each teen was asked to rate 5 of the most popular social networks (YouTube, Facebook, Twitter, Snapchat & Instagram) on each dimension. Data presented = average of scores for each social network.

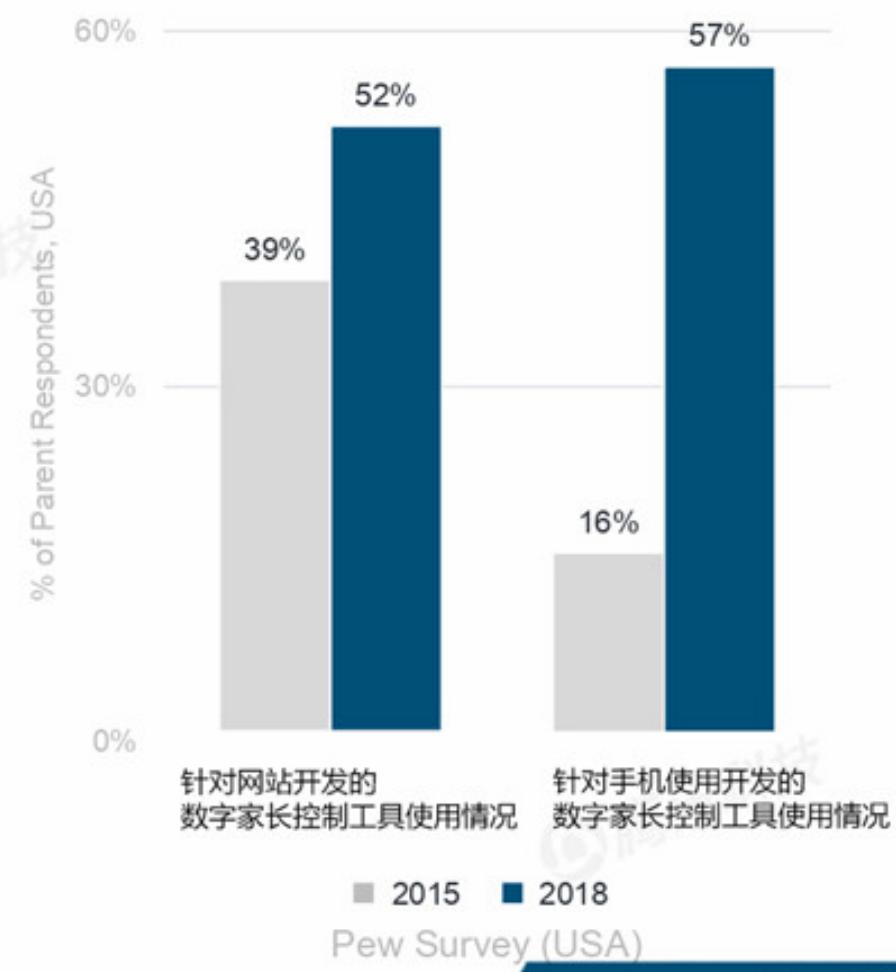
中文版制作: 腾讯科技

数字媒体= 用户采取行动减少使用

美国努力限制自己使用智能手机的成年人占比



家长采取行动监管孩子们使用互联网和手机的情况

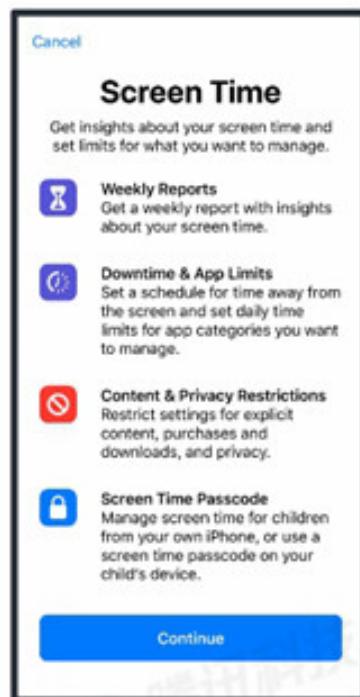


Source: Deloitte Mobile Consumer Survey, US (11/18) Pew Research (7/15 + 1/18)

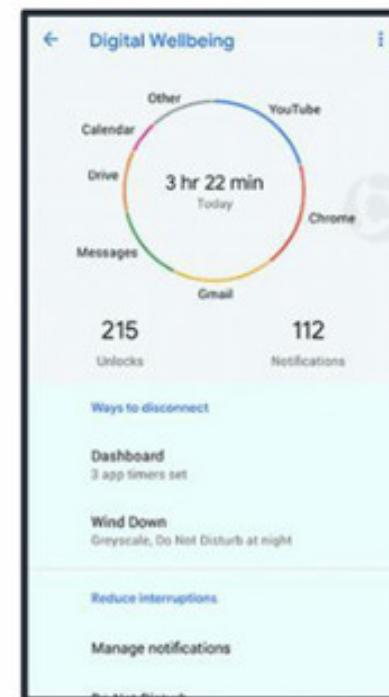
数字媒体=企业采取行动帮助用户监控数字媒体使用情况

2018年主要平台推出健康/时间追踪功能

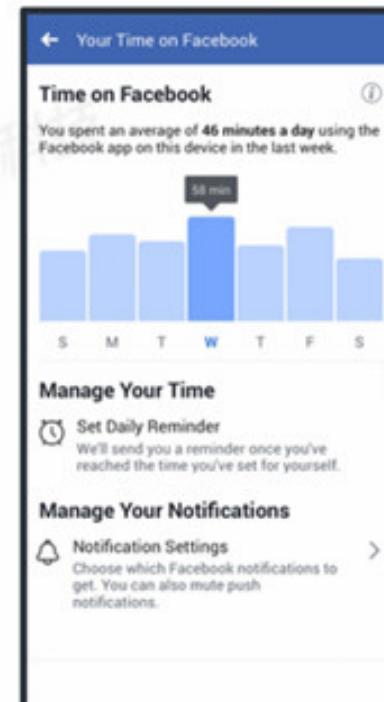
苹果
屏幕时间功能



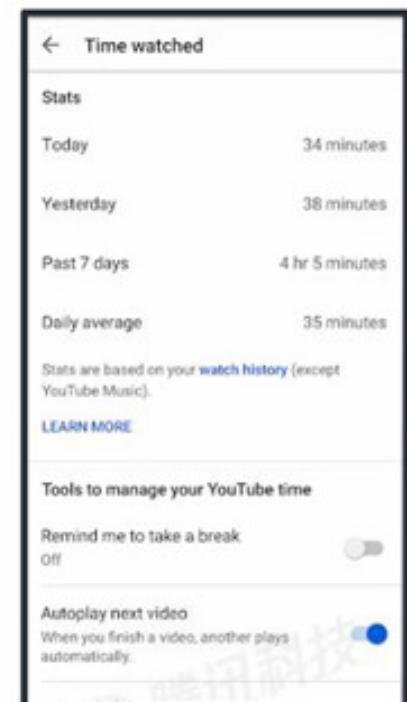
谷歌
数字健康功能



Facebook
逗留时间功能



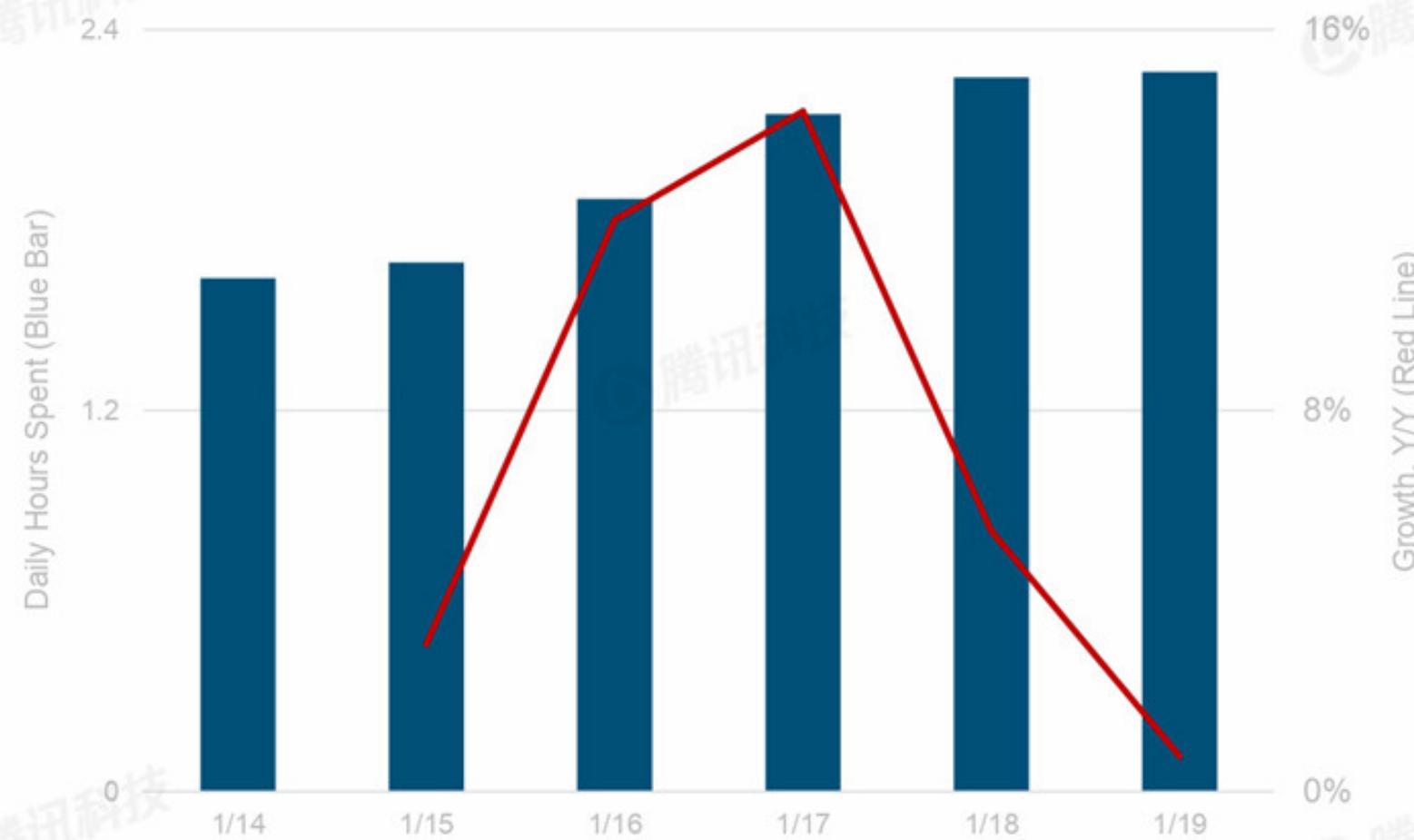
YouTube
观看时间功能



Source: Apple, YouTube, Google, Facebook

社交媒体使用量=增速减缓.....
同比增长+1% VS 同比增长6%

全球人每天在社交媒体上花费的时间



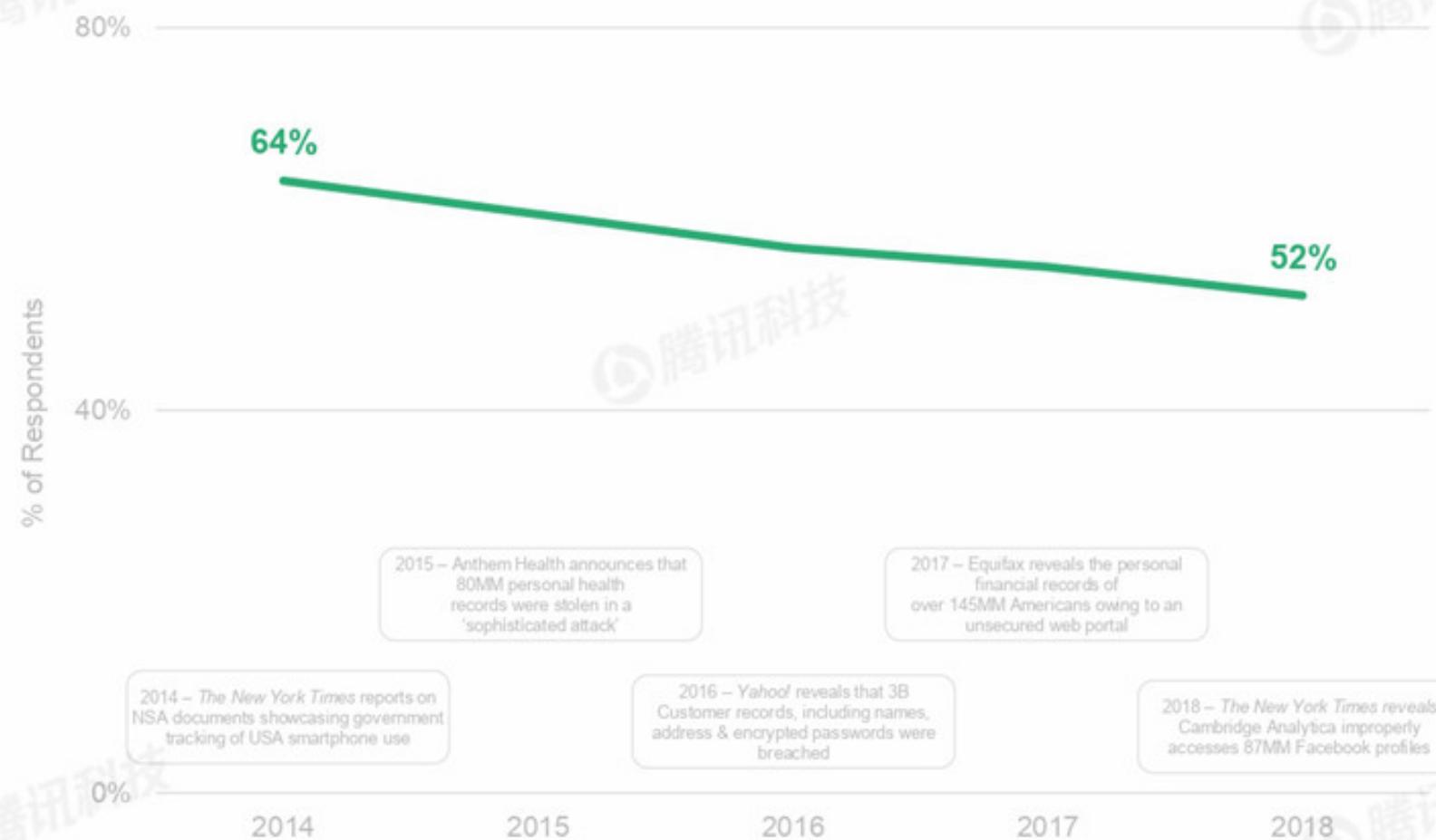
Source: Hootsuite & WeAreSocial Digital 2019 report (1/19). Note: 2019 Estimate owing to the fact that users were surveyed in January 2019, before they

中文版制作: 腾讯科技

担心过度使用 =
隐私.....

数字媒体= 非常担心私隐但在适度减少使用

相对于一年前来说，全球人变得更加担心互联网隐私



Source: CIGI-IPSOS Global Survey on Internet Security & Trust 2014, 2016, 2017, 2018. 2018 = 24,750 Internet users from 12/29/17-3/5/18. 2017 = 24,225, 2016 = 24,143, 2014 = 23,376.

中文版制作: 腾讯科技

监管机构/企业=改善消费者隐私控制

监管机构强制要求 隐私规则/政策

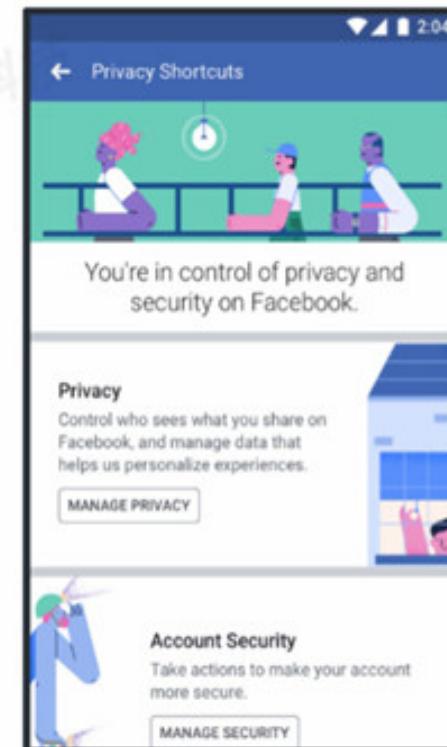
欧洲-GDPR
2016年通过
2018年生效

美国加州
2018年通过
2020年生效

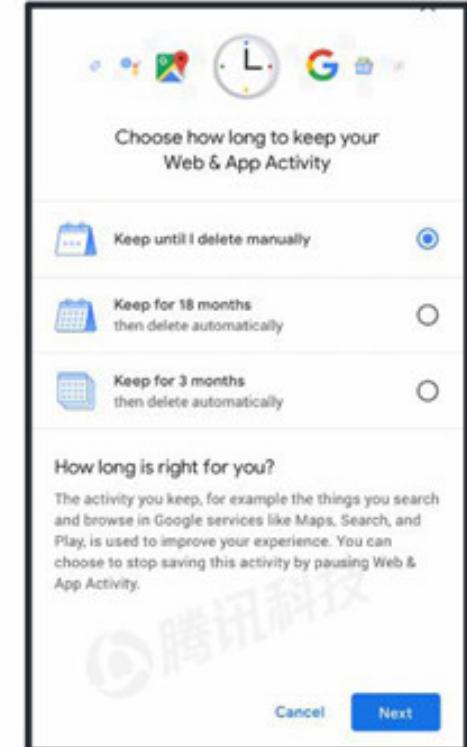


企业改善隐私管理

Facebook
2018

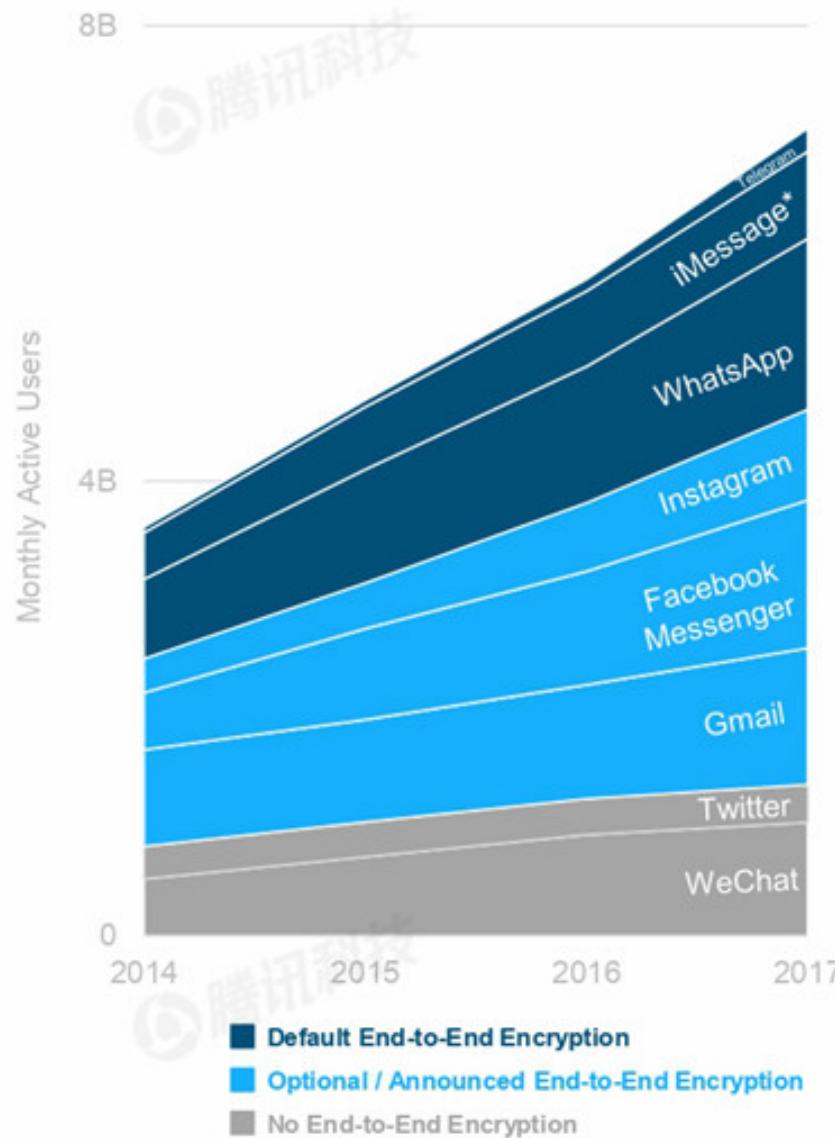


Google
2019

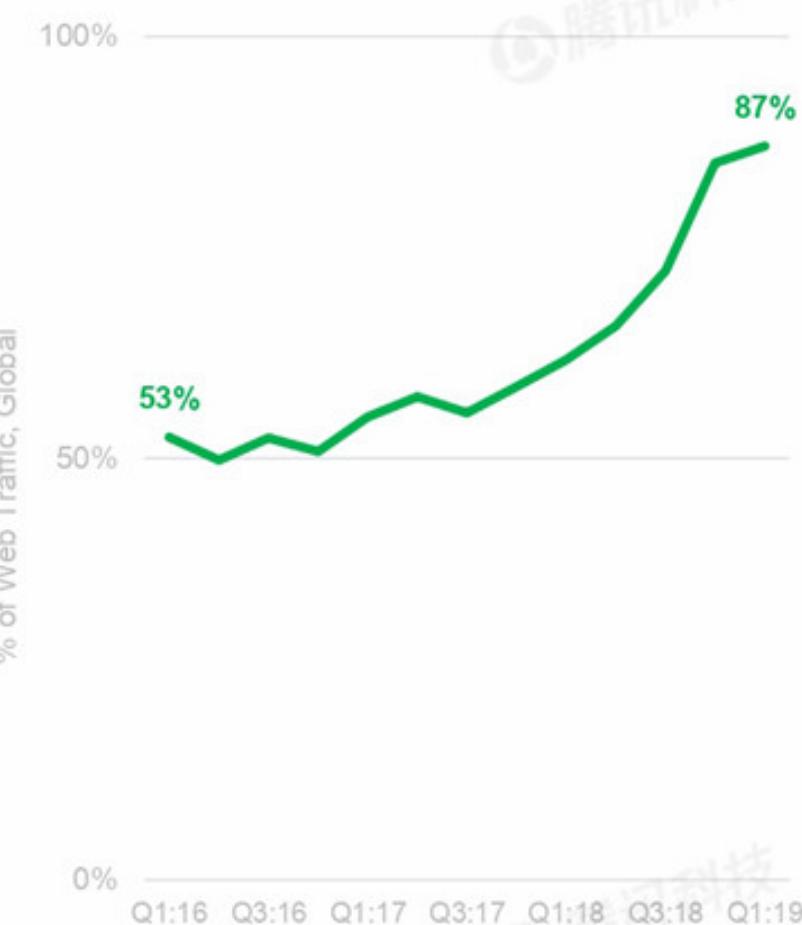


使用问题=有问题的内容/活动

精选即时通讯应用的月活跃用户



全球被加密的网络流量占比



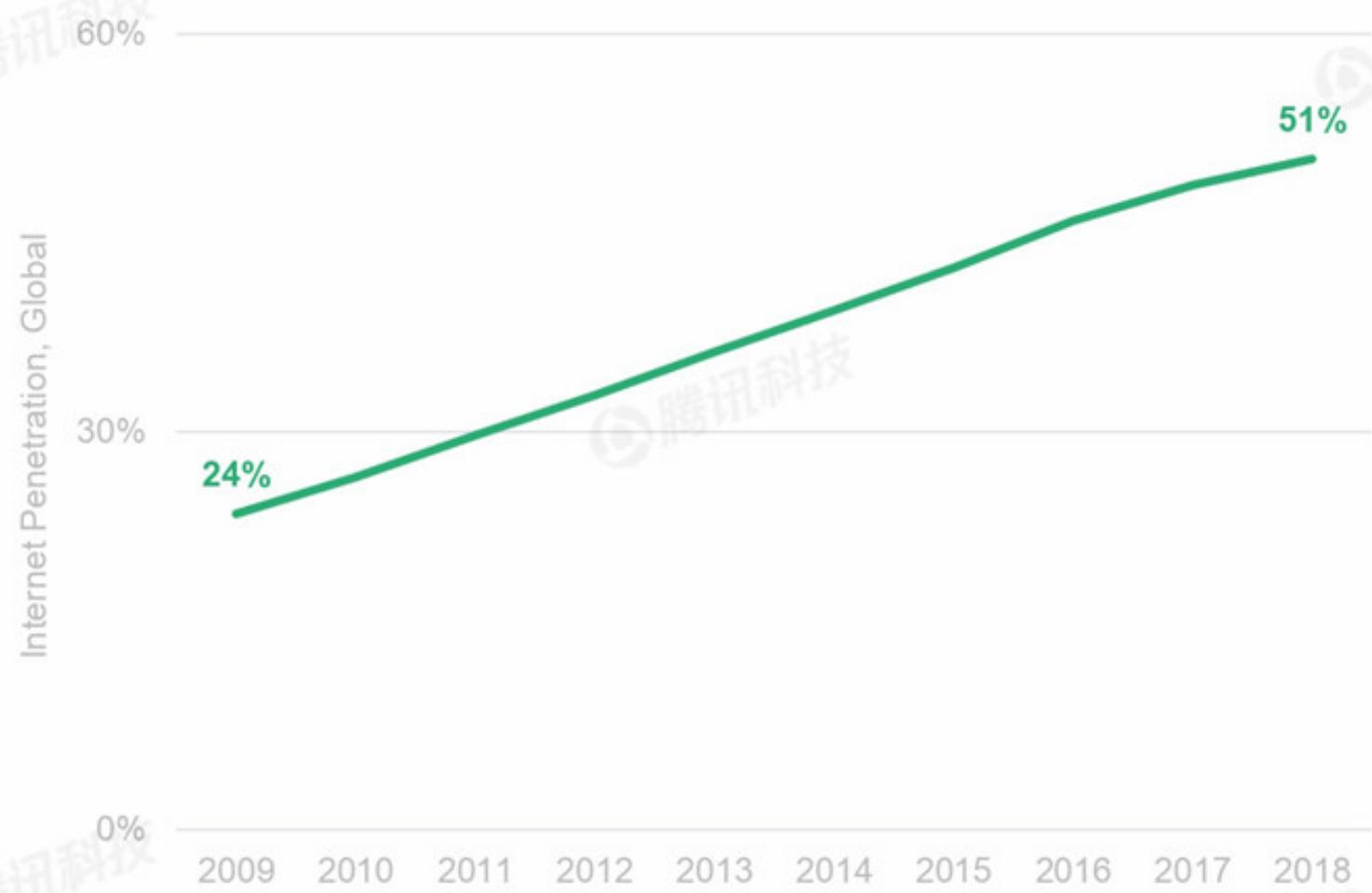
Source: Google, Tencent, Twitter, Facebook, Apple, Telegram releases & Morgan Stanley estimates. Note: *iMessage2 MAUs calculated by Credit Suisse. WeChat MAUs estimated by Credit Suisse (2014-2017). WhatsApp employs end-to-end encryption by default. Facebook Messenger has end-to-end encryption capabilities but users have to manually enable them. Instagram does not have end-to-end encryption but Facebook is planning to add that feature & make Facebook Messenger encrypted by default (1/19). All Gmail messages are encrypted at rest and in transit. Fortinet Q3:18 Quarterly Threat Landscape Report (11/18). HTTPS = Hyper Text Transfer Protocol Secure is the secure protocol over which data is sent between the browser and the website the user is connected to.

中文版制作: 腾讯科技

**使用问题 =
有问题的内容/活动**

全球超过一半人（这个数字还在增加）= 在线

2018年互联网渗透率



Source: CIA World Factbook, United Nations / International Telecommunications Union, USA Census Bureau. Internet user data: InternetWorldStats.com. Internet user data: Pew Research (USA), China Internet Network Information Center (China), Islamic Republic News Agency / InternetWorldStats.com / Bond estimates (Iran), Bond estimates based on IAMAI data (India), & APJII / GlobalWebIndex (Indonesia).

媒体格言=

人们更喜欢负面新闻(2014年).....

我们用实验室实验来发现参与者的新闻选择偏见，
并引用了一项旨在发现人们的新闻偏好的调查报告.....

不管参与者说什么，他们都表现出对负面新闻内容的偏好。

Marc Trussler & Stuart Soroka – *Consumer Demand for Cynical & Negative News Frames*, 3/14

媒体格言=

人们喜欢负面新闻(1909年) ······

一些人试图从许多报纸的头版内容认识纽约的现状，
并认定社会正处在可悲的无政府状态的边缘。
这样做的人并不会受到指责。

James E. Rogers – University of Chicago Press, Quoting *The Evening Post* in *The American Newspaper*, 1909

互联网上有问题的内容 =
可能被过滤的相对较少 + 可能被放大的相对较多

图片/流媒体视频=可能比文本更强大

以前通过编辑文字传播的新闻



现在通过直播图片和视频传播的新闻



Source: The Library of Congress, The New York Times, Pixabay, Ring

中文版制作: 腾讯科技

算法=

可能放大用户自己的行为模式

利用如下因素来打造的新闻动态

搜索历史

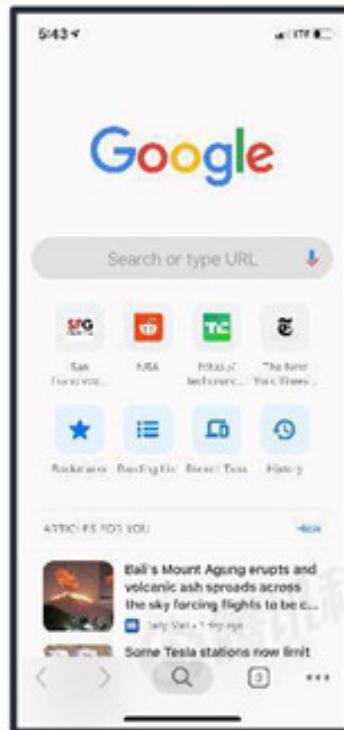
阅读历史

关注账号

应用互动

兴趣爱好

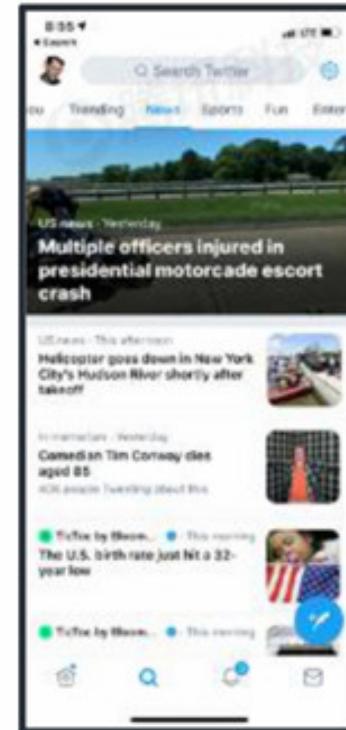
Google



Apple



Twitter



Toutiao



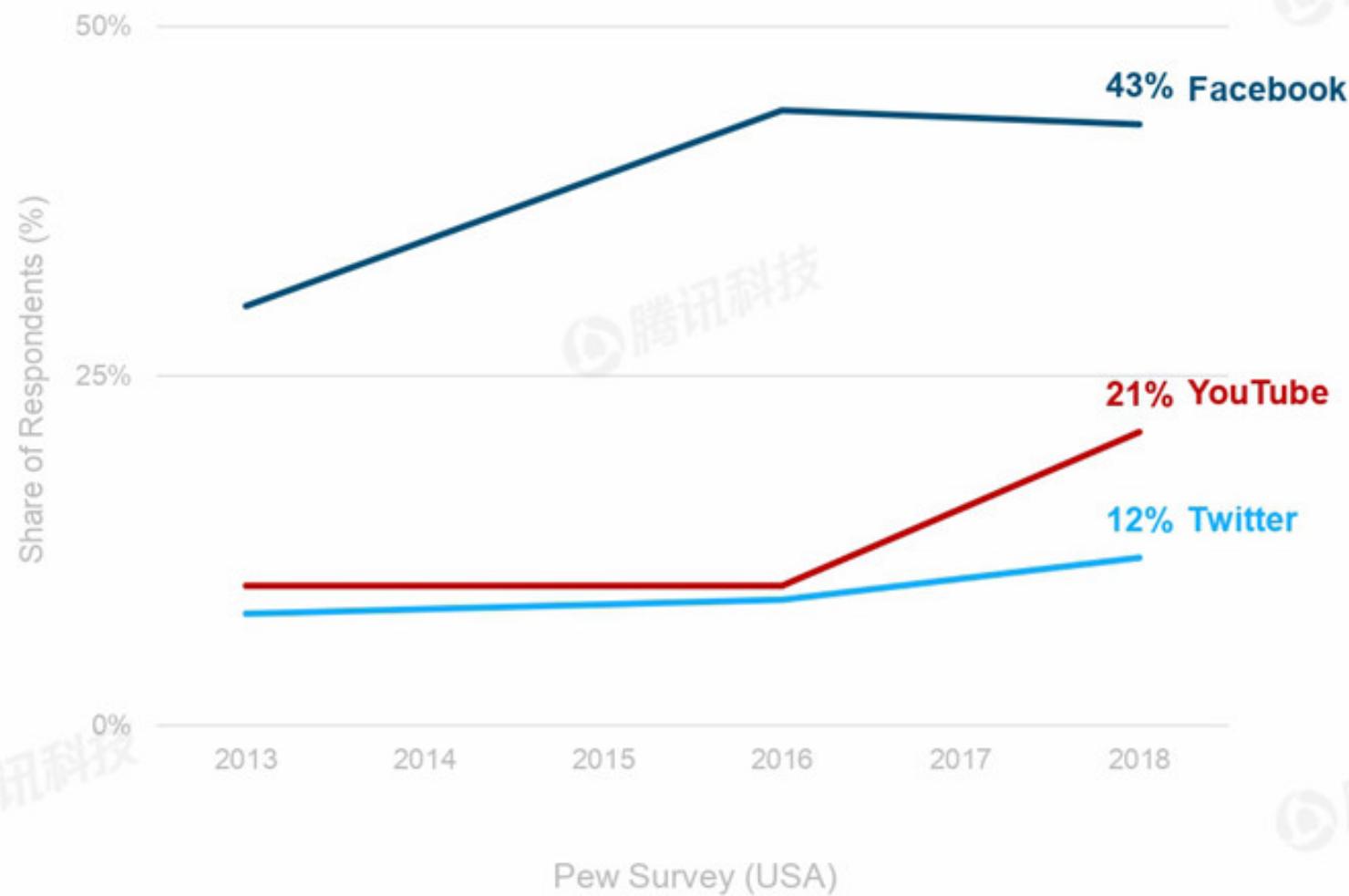
Reddit



Source: Google, Apple, Twitter, ByteDance, Reddit

社交媒体=能放大热门话题

你从_____看过新闻或新闻头条吗？

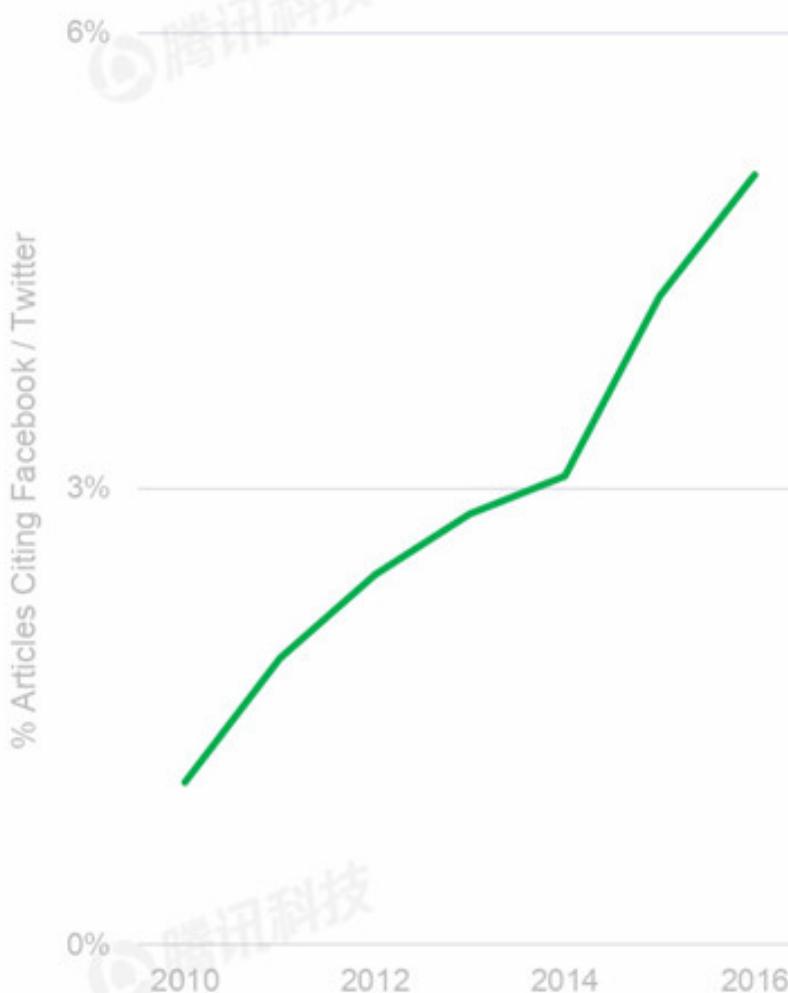


Source: Pew Research (9/18). Note Survey = 4,581 respondents interviewed between 7/30/18 & 8/12/18 vs. historical data from 2013-2017.
Note: Instagram / LinkedIn / Reddit / Snapchat / WhatsApp / Tumblr not shown owing to less than 10% of respondents using them to get news in 2018.

中文版制作: 腾讯科技

传统媒体平台=可以扩大社交媒体的热门话题

引用Facebook/Twitter上原创内容的文章占比



报纸新闻热衷于从Facebook和Twitter引用内容。
这在所有国家都一样。这些新闻包括软新闻和硬新闻，
如国内和国际政治，突发事件或各种活动报道。
最后一项凸显了社交媒体作为记者素材来源的相对优势

Gerret von Nordheim et al. – *Sourcing the Sources*, 6/18

社交媒体=
可以放大不良行为

我在____上过网

42% = 骂人

32% = 传播谣言

16% = 人身威胁

Pew Survey (USA Teens)

Source: Pew Research (9/18). Note: survey = 731 respondents age 13-17 interviewed between 3/7/18 & 4/10/18.

中文版制作: 腾讯科技

心怀叵测的作恶者=可以放大意识形态

在当今美国，恐怖主义的主要问题是个人容易受到互联网上一些不良思想的影响并变得激进。

Peter Bergen & David Sterman – *The Real Terrorist Threat in America - Foreign Affairs*, 10/18

意想不到的参与者：会放大错误信息

互联网在阴谋论信徒中培养截然不同和两极化的在线社区方面发挥了作用……信徒分享他们的观点和“证据”，其他信徒则不太愿意与批判阴谋论者分享。随着互联网的发展，阴谋集团变得更加同质，他们的信仰也随着时间的推移变得更加坚定。

--肯特大学教授凯伦·道格拉斯（KAREN DOUGLAS）

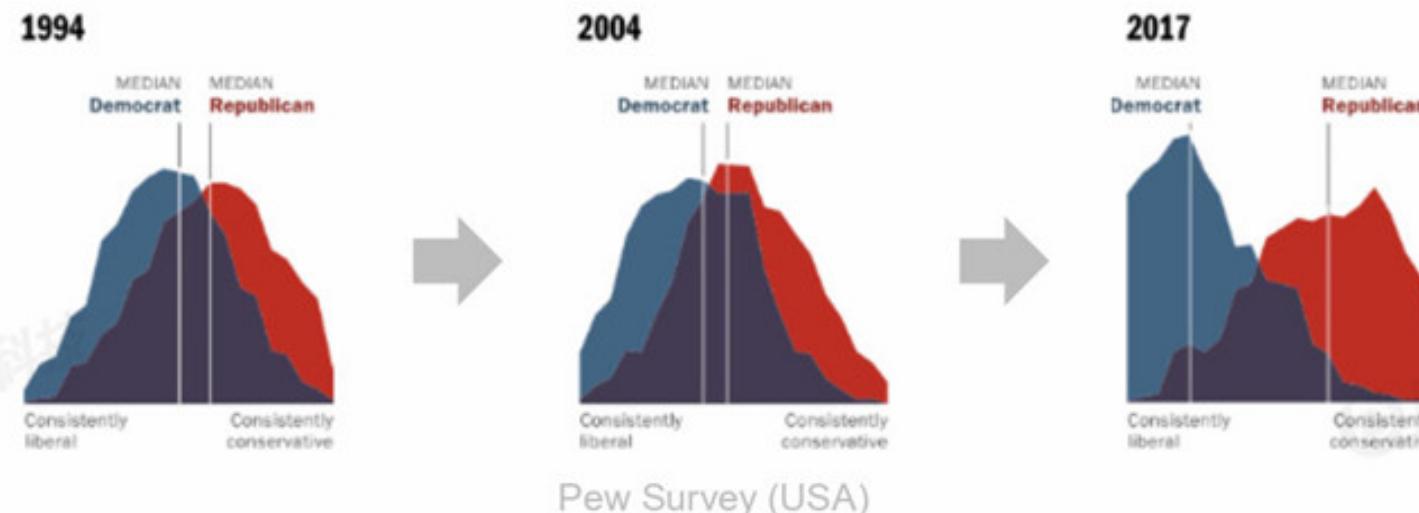
极端观点：能够放大两极化

许多因素助长了两极分化。美国人正在地理上进行自我分类，生活在政治上越来越同质的社区。社交媒体和通过互联和电视扩散的媒体渠道一直让人们能够与同类人群进行交流。身份和身份政治的发展也发挥了作用--人们被感觉身处相互零和竞争的群体所吸引。

--斯坦福大学政治科学教授弗朗西斯·福山(FRANCIS FUKUYAMA)

民主党人(蓝)和共和党人(红)的分布

On 10-item Scale of Political Values, per Pew Research, USA



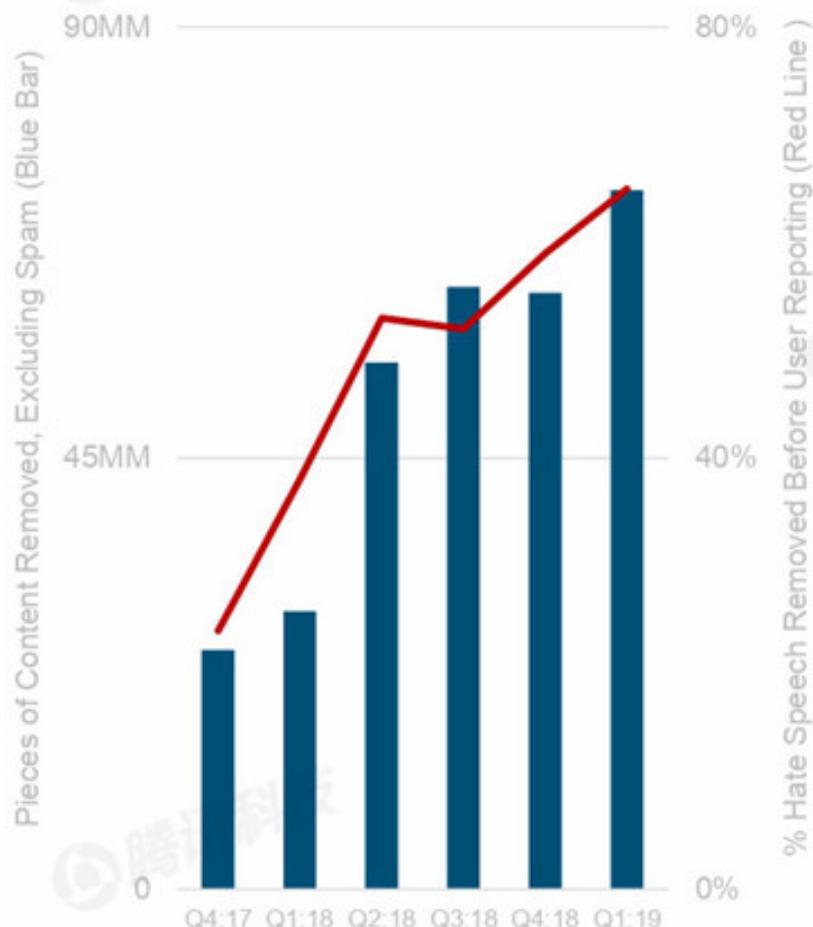
Note: Ideological consistency based on a scale of 10 political values questions (see methodology). The blue area in this chart represents the ideological distribution of Democrats & Democratic-leaning independents; the red area of Republicans & Republican-leaning independents. The overlap of these two distributions is shaded purple. Source: Pew Surveys conducted 1994-2017. Stanford release.

中文版制作: 腾讯科技

互联网平台：努力减少有问题的内容

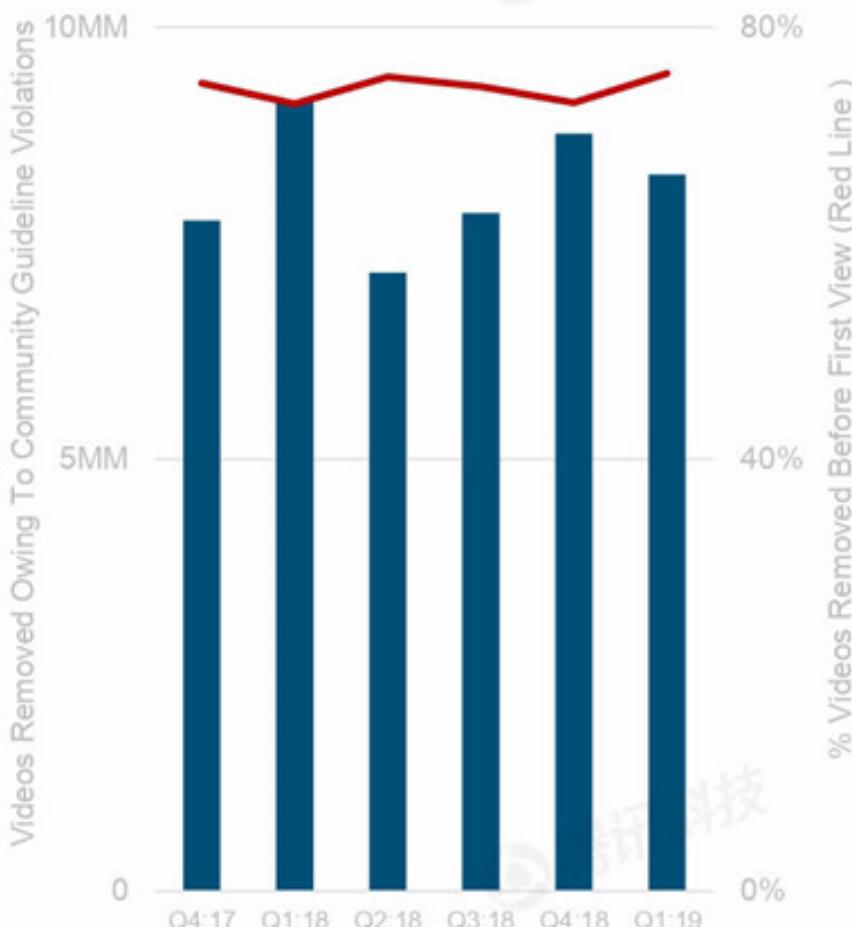
Facebook

Content Items Removed vs.
% Hate Speech Identified / Removed Before User Report



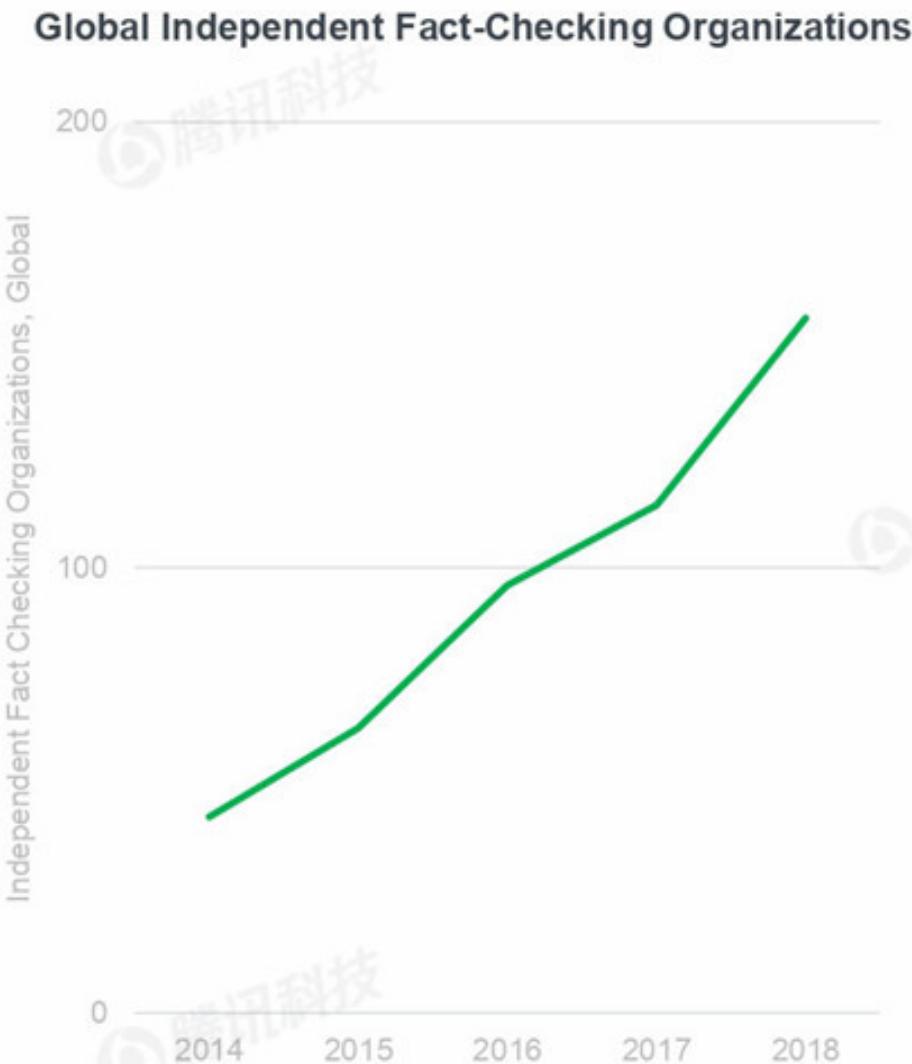
YouTube

Videos Removed for Community Guideline Violations vs.
Share Flagged / Removed Before First View



Source: Facebook Community Standards Enforcement Report (5/19). Pieces of content include posts, photos, videos or comments that violate our community guidelines. Taking action could include removing a piece of content from Facebook, covering photos or videos that may be disturbing to some audiences with a warning, or disabling accounts. Spam not included due to the scale (Billions of pieces of content removed quarterly). YouTube Community Guidelines enforcement Report (5/19). YouTube Community Guideline Violations can include sexual content, graphic / violent content, harassment, etc.

消费者+商家=努力审核有问题的内容



侧重于事实核查和政策问责报告的媒体数量迅速增加。在新的伙伴关系和技术的支持下，2016年大选期间进行了更多的事实核查。包括美国全国广播电台(NPR)和《华盛顿邮报》等媒体机构报道他们调查工作的读者数量打破纪录。

我们当然能够继续改进管理YOUTUBE平台的方式.....

我看到我们已做出了巨大的改进.....如果追溯到两年前，

还有许多关于我们如何处理暴力极端主义的文章.....

如果与专家在今天谈论这些问题，就会看到我们做出了多大的进步

如果你把更好的政策和技术结合起来，大规模地做到这一点，

我想你会在一个更好的地方。

--YOUTUBE首席执行官苏珊·沃伊奇基

国土安全部与主要社交媒体公司合作，鼓励他们继续监管自己的网站。

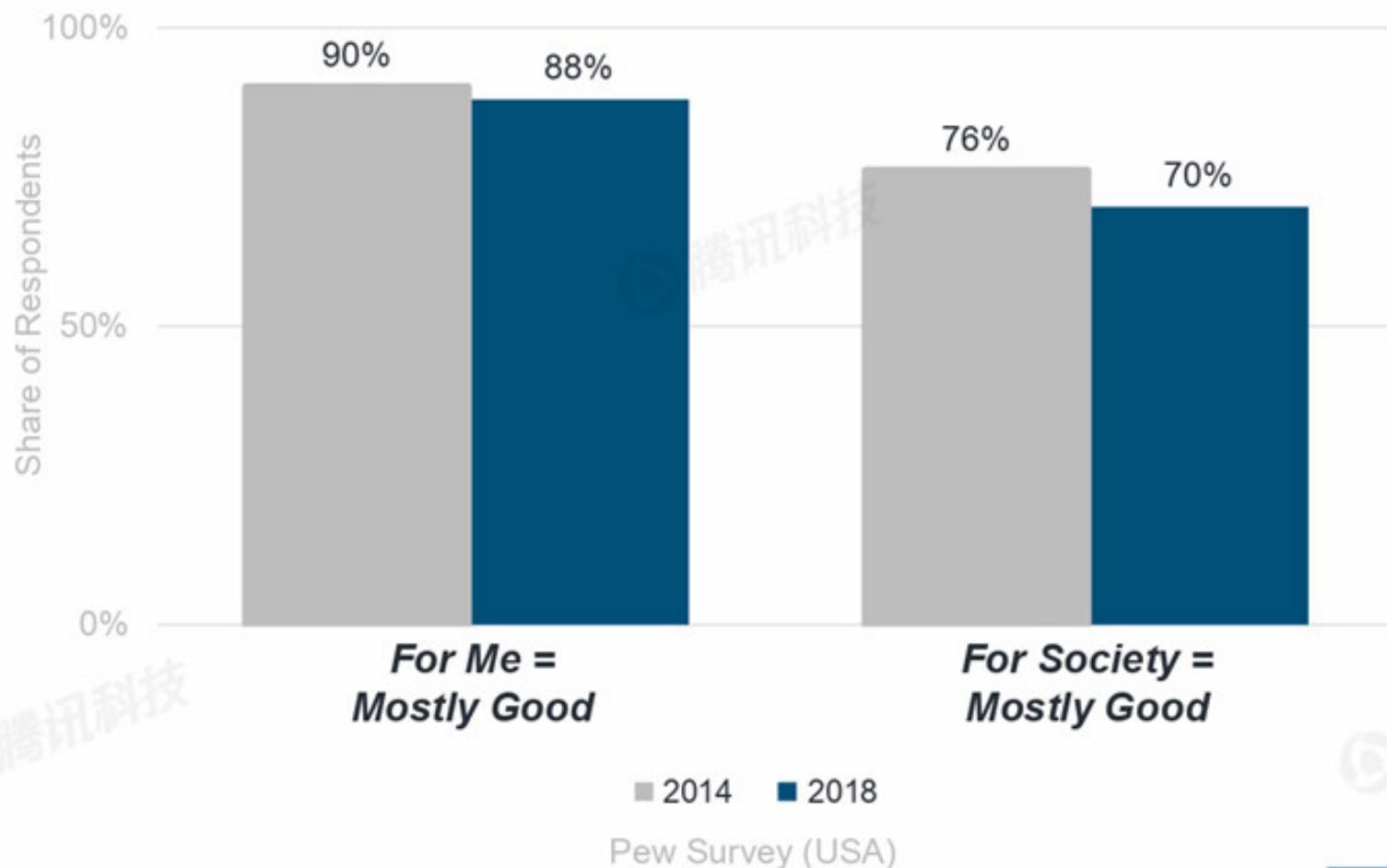
我们确实看到这些努力已结出一些果实。我认为我们仍有很长的路要走。

我们期待着在这种环境中继续与社交媒体公司合作。

--国土安全部首席副部长布莱恩·墨菲

对互联网的感知：对个人和社会主要正面影响

当你把互联网的优势和劣势加在一起，
就发现对个人和社会的正面影响占绝大多数。



Source: Pew Research. Poll of 1,785 USA Internet users from 1/3/18-1/10/18 & 2015, released on 4/30/18.

中文版制作: 腾讯科技

放大优点+最小化缺点的古老挑战=
迂回曲折

与信息+数据无关的全球关系： 进化差异/快速

在某种意义上,我们所知道的WWW已经是过去，
如今的互联网已完全不同。
用户体验的互联网当前取决于当地的监管。

Mark Scott – Chief Technology Correspondent, Politico, 12/17 & 2/18

我们需要新一代的法律来监管新一代的技术。

Brad Smith – President & Chief Legal Officer, Microsoft, 2/18

模式正在发生转变。政府不干预的立场正在转变，
因为认识到如果想要保留跨境互联网，就需要新的监管系统。

Paul Fehlinger – Co-Founder, Internet & Jurisdiction Policy Network, 2/18

Note: 'Splinternet' originated by Clyde Wayne Crews Jr. writing for the Cato Institute in 2001.

全球互联网自由……

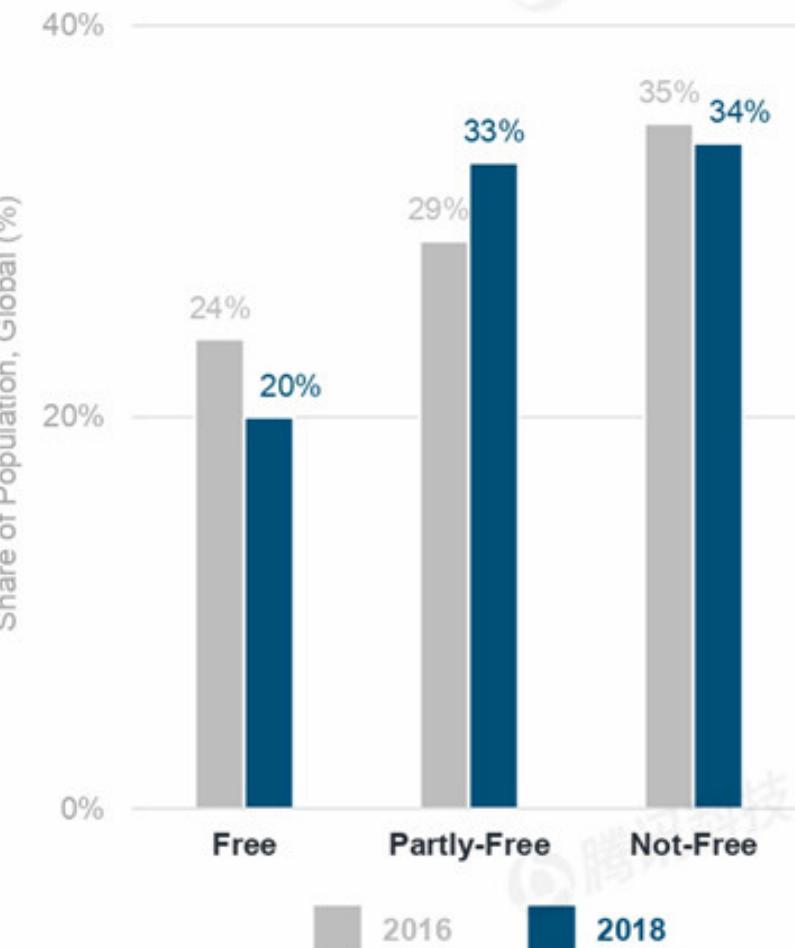
部分自有：增长 自由/不自由：下滑

自由之家-网络自由（全球，2018年）

互联网用户生活的国家

- 政治、社会、或宗教内容受到审查/封堵 55%
- 政府互联网监管力量在过去一年得到增强 47%
- 接入特定社交媒体/信息平台受限 47%
- 的政府因政治原因经常性切断互联网和移动网络 42%

互联网人口“互联网自由状况”



Open Internet =

Can Benefit All Constituents

开放互联网：
能够让所有要素受益

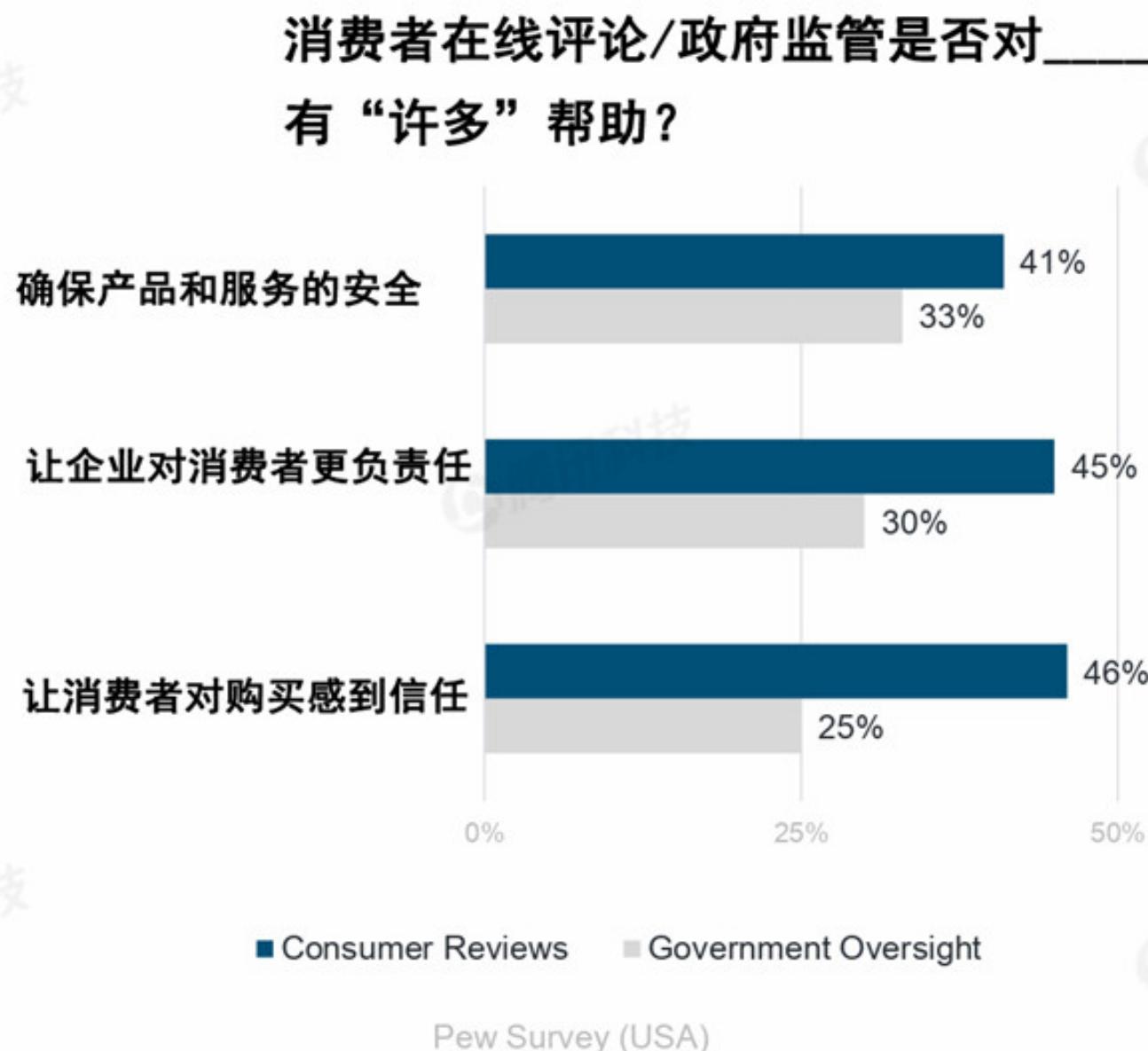
开放互联网： 核心构成动机

消费者：
希望获得想要的效率和廉价

商家：
希望赚钱的销售产品和服务

监管者：
希望保护消费者/商家/社会机构

开放互联网： 在线评论可以增强多方面的责任感



Source: Pew Research Survey (12/15). N = 4,787 USA Consumers.

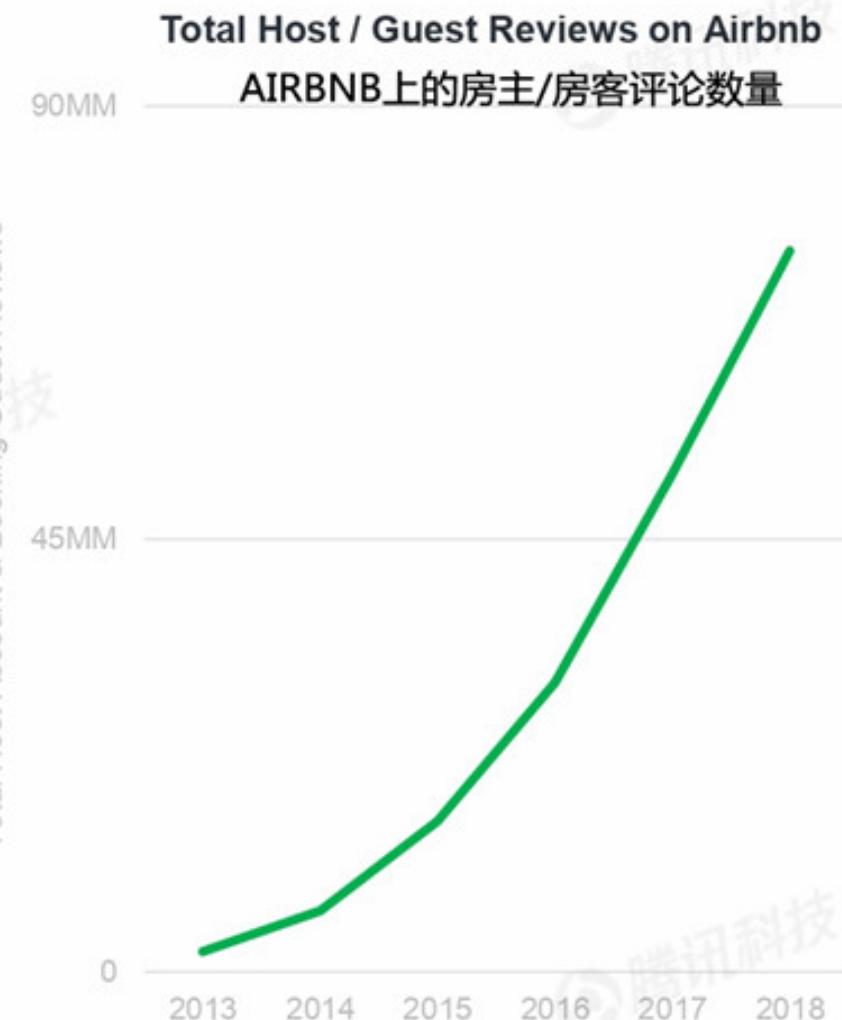
开放互联网： 在线评论可以增强多方面的责任感

Airbnb

安全在我们AIRBNB排在首位。只有当用户感到安全的时候，整件事才会起作用。我们的信任与安全团队有数百人，他们的工作是为AIRBNB社区提供帮助。

70%的客人都会留下评论，这意味着我们开发的系统让整个社区能够看到AIRBNB房产的评论，并打造信任。

Brian Chesky – CEO, Airbnb, 4/19



Source: Total host / guest reviews per Airbnb (6/19). Each booked trip taken on Airbnb can have 0-2 reviews depending on if the host account has multiple trips listed.

Brian Chesky quote per interview on CBS News (4/19)

中文版制作: 腾讯科技

*Reveals / Actions / Reactions
Amplified on Internet =*

*Can Drive Transparency + Rapid Change for
Consumers / Businesses / Regulators*

展现/行动/反应在互联网上放大：

能够推动透明+消费者/商家/监管者的快速变化

展现/行动/反应.....

TWITTER : 公民的功勋工具人道主义关切

Humanitarian Concerns

JJ Watt Hurricane Harvey Relief



\$42MM Raised...
1 Year
(2017)

Blood Donors India

I am happy to see, @Twitter take up this cause to strengthen the overall health and well-being of the country with the #BloodDonors initiative. This will play a powerful role in mobilizing resources and strengthening the blood donation drive in India.
119 · 11:25 PM - Mar 19, 2018

124 people are talking about this

Good news! Glad to announce our partnership with @TwitterIndia on #BloodDonors with the support of @MoHFW_INDIA and @PNadda. We're going to work together to help save many more lives around the country. Thank you to all donors and volunteers...
121 · 3:08 AM - Mar 20, 2018 · Bengaluru, India

413 people are talking about this

#Chennai
Need 4 units AB+ve blood
At MDT hospital
Call 9900569168
Via @cartonmumbai @RAMDAJ3270489
19 · 10:35 AM - Mar 20, 2018

8 people are talking about this

...11K Donations...
1 Year
(2017)

Emergency Rescue

We had a serious injury and NEED Help! Can someone please call Winding Trails in Farmington, CT tell them I'm stuck bike crash woods.
2 PM - 27 Jul 2010

playing on stretcher in ambulance now. Medics "that Twitter thing really must work!"
1 PM - 27 Jul 2010

In safe a warm in UConn Hospital, I have possible damage to shoulder, head, ribs & elbow. I c
t
1 PM - 27 Jul 2010

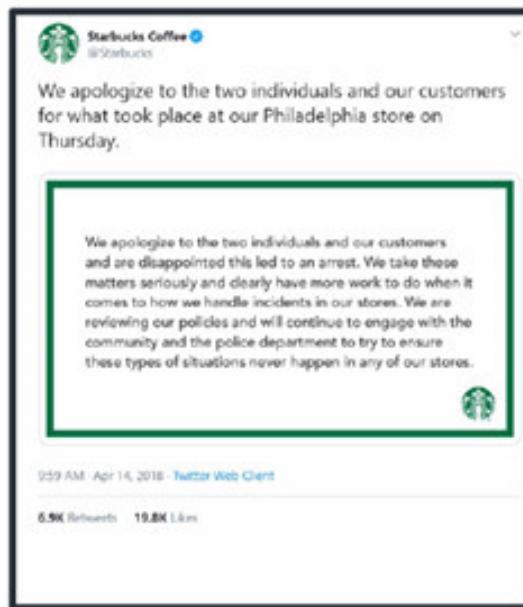
...Accident -> Safety
<3 Hours
(2010)

展现/行动/反应.....

TWITTER : 消费者+商户的通讯工具消费者/商户的顾虑

Consumer / Business Concerns

Starbucks



Glossier



Under Armour



Starbucks Security Policy...
<2 Days
(2018)

...New Packaging...
<1 Day
(2019)

...New Steph Curry Shoe Sizes
<1 Week
(2018)

展现/行动/反应.....

社交媒体：公民的通讯工具+监管者

69%的人通过社交媒体让政府官员注意到问题

67%的人通过社交媒体为社会变革创造持续的运动

58%的人通过社交媒体影响政府政策决定

Source: Pew Survey of 4,594 USA adults (6/18). Note: Percentages = respondents who responded 'very important' or 'somewhat important'.

中文版制作: 腾讯科技

开放互联网：可能会杂乱，但却有效.....

消费者/商家/监管者：

合作的关键

放大优点+最小化缺点

在互联网成长的前20年中，人们对技术本身寄予了太多的信任。

对处理监督技术的传播、滥用在线平台和普遍破坏信任等挑战做得不够充分。

.....政府应当设定更好的基线和度量，来评估互联网的真正影响，
以及采取什么样的行动扬善除恶。

倡导开放互联网应当知道，监管能够有所帮助，并对意想不到的后果
有所警惕。

.....所有上述利益相关者应当继续结成跨国联盟，通过支持弹性、
专注和正确的努力来干山自由网络。

漫长旅途的第一步：算法权利法案？

众包算法权利法案，根据西格尔·塞缪尔@沃克斯



- 1) 透明
- 2) 解释
- 3) 同意
- 4) 没有偏见
- 5) 反馈机制
- 6) 数据可移植性
- 7) 补偿
- 8) 算法素养
- 9) 独立监督
- 10) 联邦/全球治理

Source: In early 2019, Vox reached out to 10 experts (including Kartik Hosanagar – original proposer of an Algorithmic Bill of Rights) at the forefront of investigating how Artificial Intelligence risk is creeping into multiple aspects of life. Vox reporter Sigal Samuel asked them each to name a protection the public needs enshrined in law; resulting in a crowdsourced, proposed Algorithmic Bill of Rights.

Full detail available - <https://www.vox.com/the-highlight/2019/5/22/18273284/ai-algorithmic-bill-of-rights-accountability-transparency-consent-bias>

互联网与社会

第一修正案的一个基本原则是，所有人都可以进入他们可以说话和倾听的地方，然后经过思考，再次说话和倾听。今天，网络空间是人们交换意见的最重要场所之一，特别是社交媒体，提供了相对无限、低成本的各类沟通方式。
---安东尼·肯尼迪，前美国最高法院大法官

如果有时间通过讨论来揭露谎言和谬误，通过教育过程来避免邪恶，那么应该采取的补救措施是更多的言论，而不是被迫保持沉默。
---路易斯·布兰代斯，前美国最高法院大法官

网络攻击：复杂程度+范围继续上升

网络攻击：不断进化的支持者/目标/要求/检测

1) 国家支持的参与者攻击 : 上升

美国/英国/荷兰/德国已公开表示国家支持参与者

2) 大规模数据提供商攻击 : 上升

云服务提供商/电信公司/数据代理公司看到攻击活动升级

3) 货币勒索案 : 上升

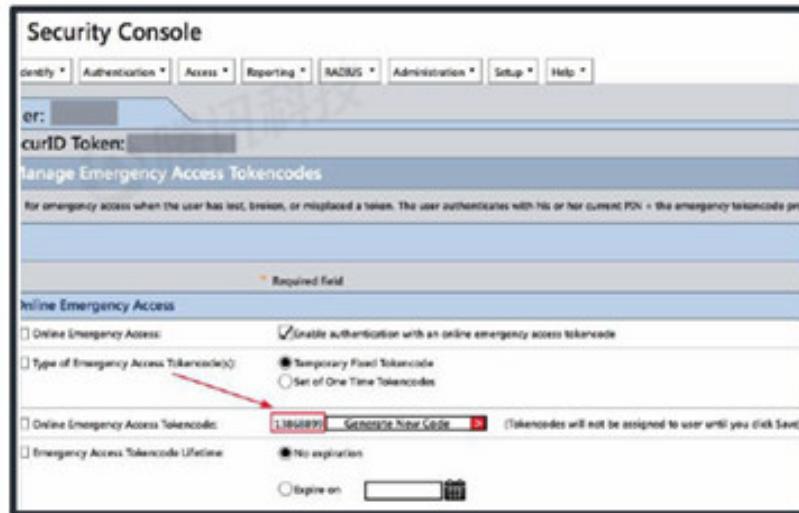
无法归源的货币 (如数字加密货币) 让匿名勒索支付成为可能

4) 攻击检测停留时间 : 持续降低

平均时间 : 78天 (2018年) 、 101天 (2017年)416天 (2011年)

Source: FireEye M-Trends Report 2019

网络攻击：在线系统缺陷创造出的机会



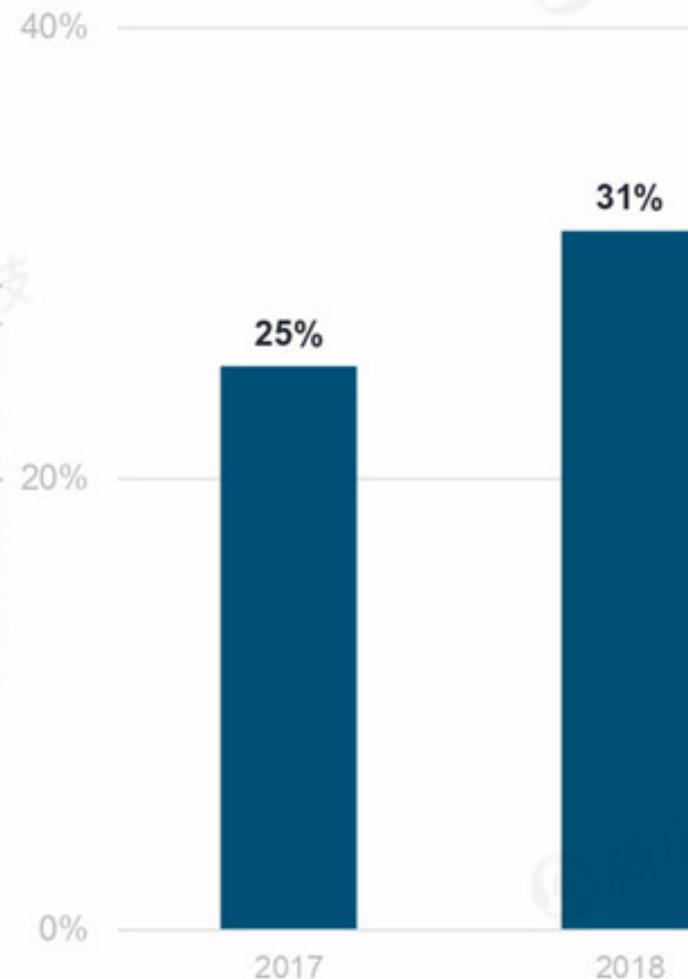
A financial services firm engaged a Mandiant Red Team to evaluate the effectiveness of its information security team's detection, prevention & response capabilities. The team was able to obtain full administrative control of the company domain & compromise all critical business applications without any software or operating system exploits.

Instead, the team focused on identifying system misconfigurations, conducting social engineering attacks & using the client's internal tools & documentation.

FireEye Threat Research, 4/19

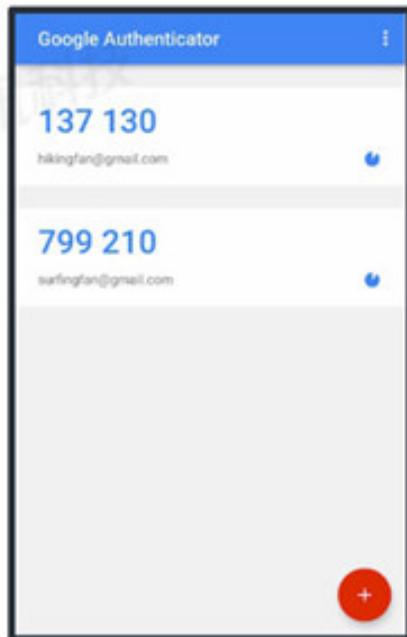
数据中心运营者：过去一年经历的宕机时间

per Uptime Institute



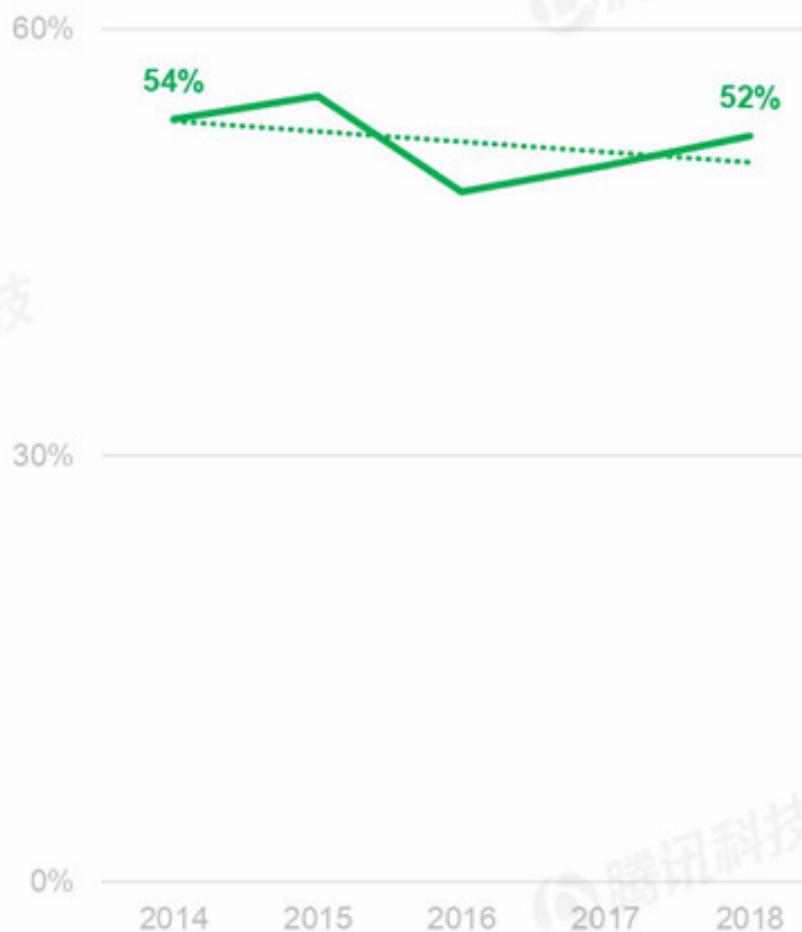
Source: Uptime Institute 2018 Report. FireEye Note: Uptime Institute is a professional services organization best known for its data center center uptime. Each year, it conducts a survey of 900 data center operators on a variety of topics, including data center outages.

双重身份验证：不完全采用限制了有效性



安全专家发现通过多重身份验证保护其
虚拟专用网络或远程访问基础架构的客户端
数量大幅增加，然而，在企业内部网络中，
仍经常缺少多重身份验证的应用。

全球支持双重身份验证的网站数量



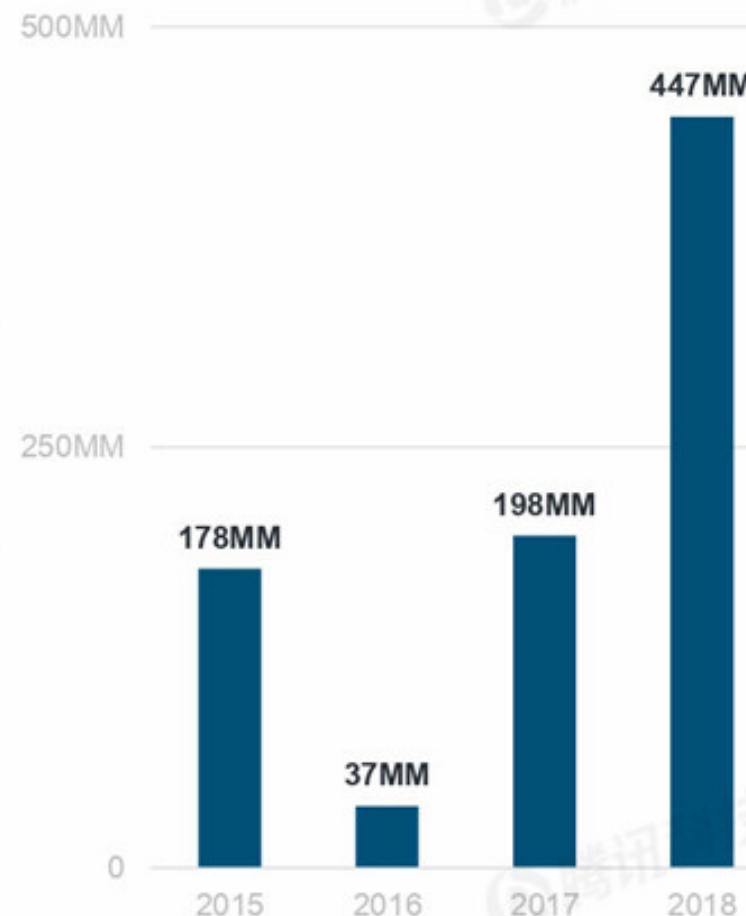
Source: Elie Bursztein (Security & Anti-Abuse Lead @ Google), analysis of dongleauth.info database data (12/18).

中文版制作: 腾讯科技

网络攻击：越来越关注敏感数据

随着越来越多的客户开始使用软件即服务和云服务，攻击者盯上了数据。对能够接触到海量用户数据的云服务提供商、电信公司、其他各类组织的攻击在2018年大幅增长。

安全漏洞中暴露的敏感记录



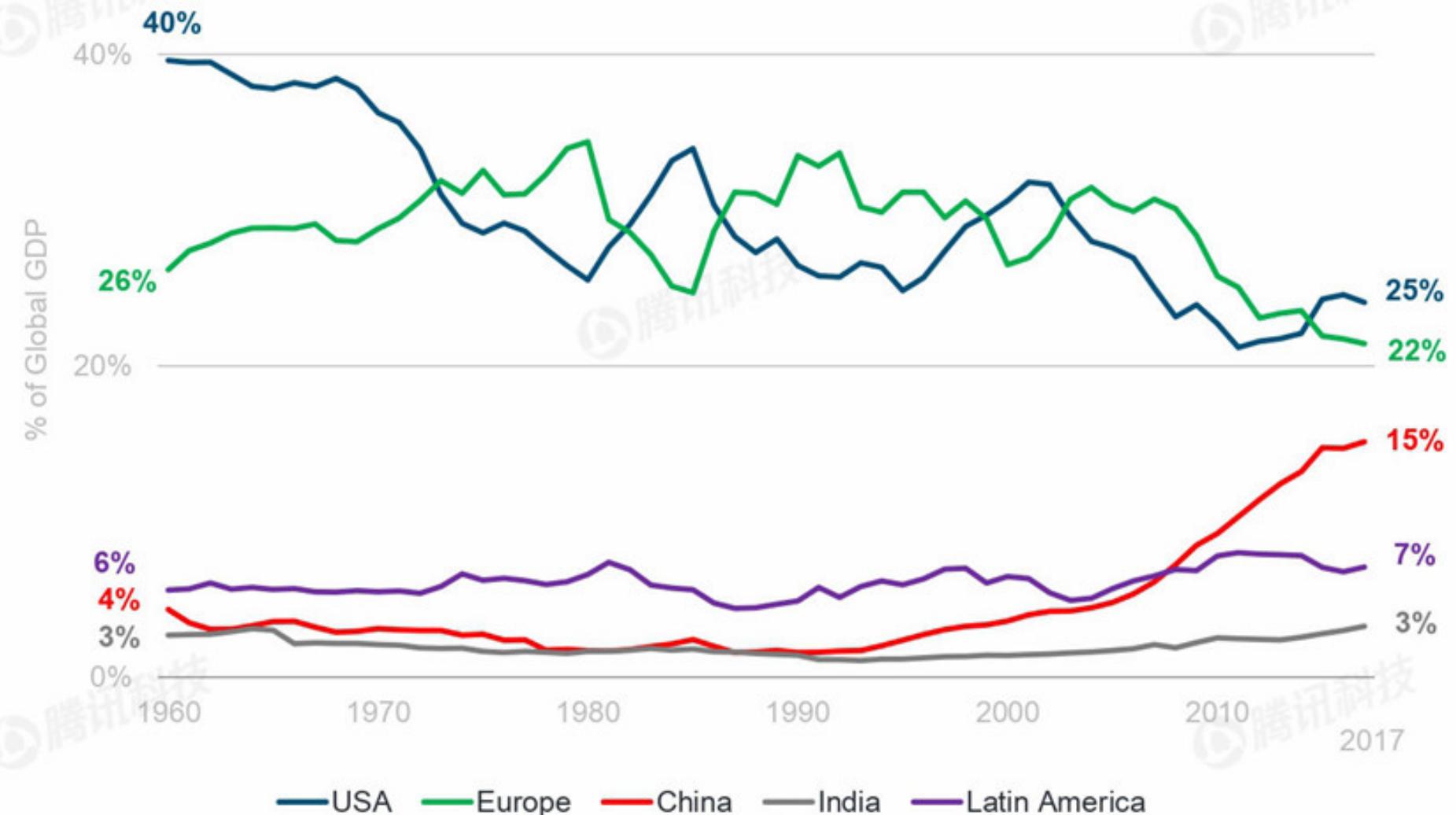
网络攻击：国家支持放大了效果

各国正在利用网络战的工具来破坏互联网的基础：信任。他们正攻击银行，干涉选举，盗取知识产权，使私营公司陷入停顿。其结果是，世界经济和信息交流所依赖的舞台变成了一个活跃的战场。网络运营象征着一种新的竞争方式……在一次又一次的行动中，许多几乎没有被更广泛的世界所记载，国家正在将互联网武器化。所有这些事件都发生在一个灰色的冲突地带，低于直接战争的门槛，但高于纯粹和平时期的行为。

工作：强劲的经济指标.....
互联网支持的服务/工作帮助

全球相对国内生产总值（美元）：中国+美国+印度上升……欧洲下滑

全球国内生产总值贡献（美元）

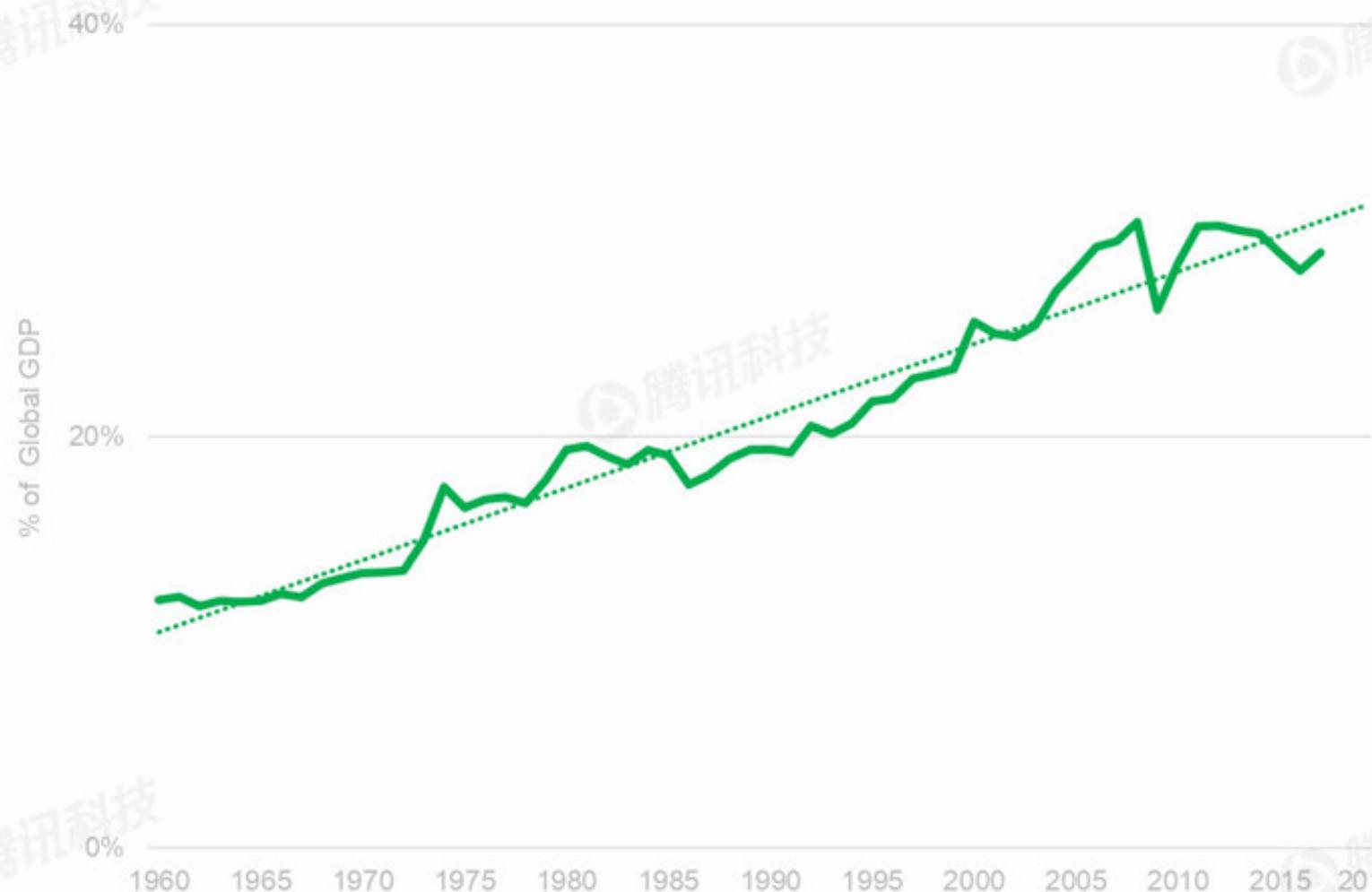


Source: World Bank (GDP in current \$). Other countries account for ~30% of global GDP.

中文版制作: 腾讯科技

跨境贸易：占全球国内生产总值的29% 全球经济的基础

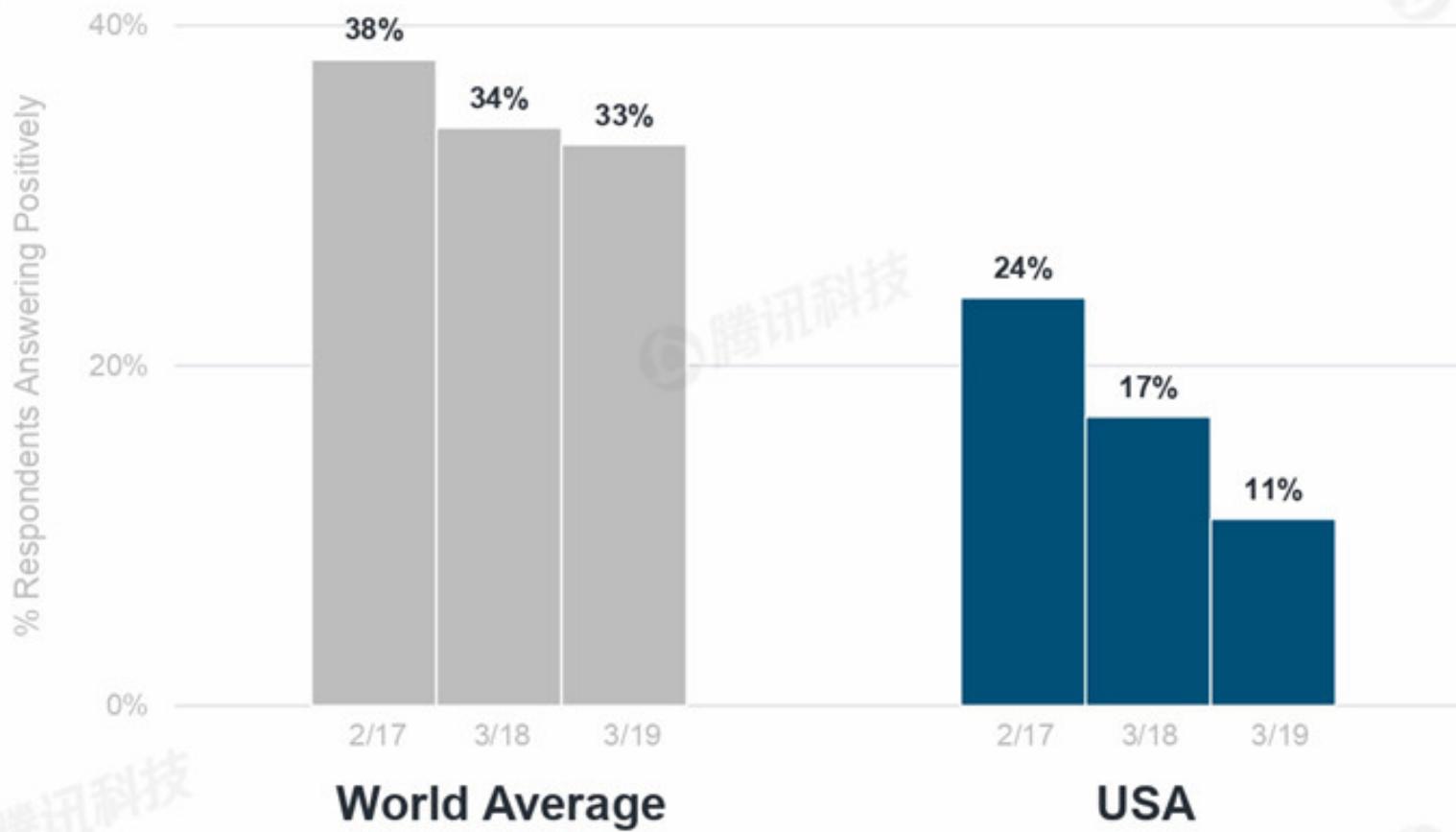
贸易占全球国内生产总值的百分比



全球相对失业顾虑：高.....
美国：低失业率.....

失业与就业岗位是否是你们国家的三大担忧之一？

Ipsos / Reuters Surveys



Source: Ipsos Survey Data of ~20K global respondents. Ipsos conducts this survey on a monthly basis, asking the same questions of a statistically representative sample of people in 28 representative countries. February 2017 included owing to lack of published March 2017 report. World average reflects average of Germany, Israel, UK, USA, Belgium, Japan, Poland, Sweden, China, Hungary, Peru, Turkey, India, Australia, Canada, Mexico, Brazil, Russia, France, Argentina, Saudi Arabia, South Africa, South Korea, Italy & Spain.

中文版制作: 腾讯科技

全球相对失业顾虑……

美国：极大的低于其他国家

失业与就业岗位是否是你们国家的三大担忧之一？

Ipsos / Reuters Survey (3/19)

Rank	Country	Share
1	Italy	69%
2	South Korea	66
3	Spain	61
4	South Africa	57
5	Argentina	49
6	India	44
7	Turkey	44
8	Mexico	38
9	Brazil	35
10	Saudi Arabia	34
11	Russia	33
12	France	32
13	Australia	30

Rank	Country	Share
14	China	29%
15	Canada	27
16	Belgium	24
17	Peru	22
18	Japan	19
19	Israel	18
20	Hungary	17
21	Sweden	15
22	Poland	15
23	UK	14
24	Germany	11
25	USA	11

Source: Ipsos Survey Data of ~20K global respondents. Ipsos conducts this survey on a monthly basis, asking the same questions of a stratified sample of >1K people in USA & other countries. Note: Percentages do not add to 100% because respondents were allowed to pick 3 choices.

中文版制作: 腾讯科技

美国相对失业顾虑：低且下滑

你们国家的三大担忧是什么？

Ipsos / Reuters Surveys

February 2017

March 2018

March 2019

Rank	Concern	Share
1	Healthcare	36%
2	Crime & Violence	33
3	Terrorism	31
4	Unemployment & Jobs	24
5	Financial/Political Corruption	22
6	Immigration	21
7	Moral Decline	20
8	Poverty & Social Inequality	19
9	Taxes	17
10	Education	16
11	Climate Change	13
12	Extremism	12
13	Environmental Threats	9
14	Maintaining Social Programs	7
15	Inflation	6
16	Childhood Obesity	3
17	Access To Credit	2

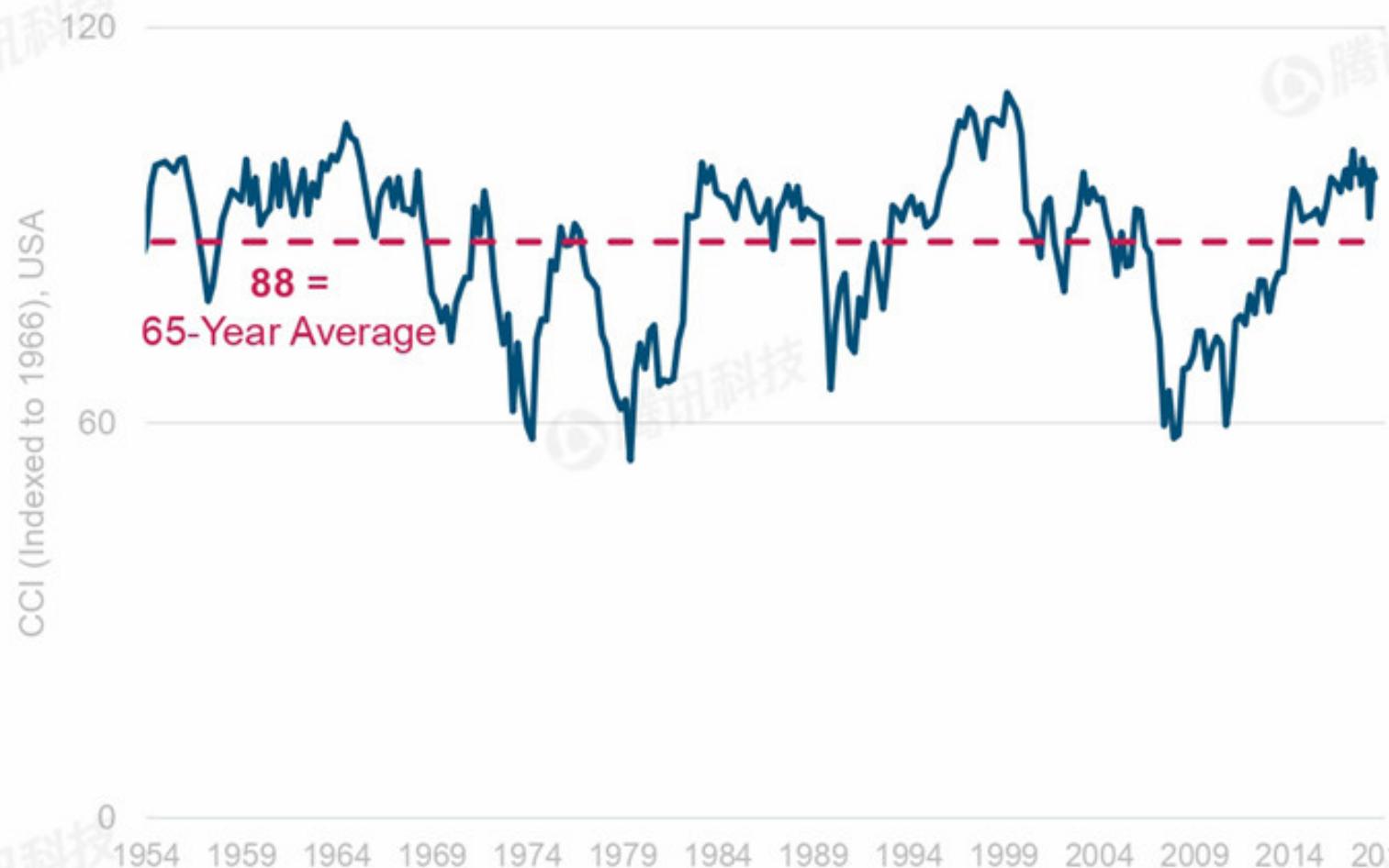
Rank	Concern	Share
1	Crime & Violence	35%
2	Healthcare	33
3	Terrorism	29
4	Financial/Political Corruption	23
5	Immigration	23
6	Moral Decline	23
7	Poverty & Social Inequality	19
8	Unemployment & Jobs	17
9	Extremism	15
10	Education	15
11	Taxes	14
12	Climate Change	12
13	Environmental Threats	10
14	Inflation	7
15	Maintaining Social Programs	5
16	Childhood Obesity	2
17	Access To Credit	2

Rank	Concern	Share
1	Healthcare	39%
2	Financial/Political Corruption	28
3	Immigration	28
4	Moral Decline	26
5	Crime & Violence	22
6	Poverty & Social Inequality	21
7	Climate Change	21
8	Extremism	19
9	Terrorism	18
10	Education	15
11	Taxes	15
12	Unemployment & Jobs	11
13	Environmental Threats	10
14	Inflation	6
15	Maintaining Social Programs	6
16	Childhood Obesity	4
17	Access To Credit	0

Source: Ipsos Survey Data of ~20K global respondents. Ipsos conducts this survey on a monthly basis, asking the same questions of a statistically representative sample of people in USA. Note: Percentages do not add to 100% because respondents were allowed to pick 3 choices.

消费者信心指数（美国）：高且上涨 当前值为97VS. 88的60年平均水平

消费者信心指数 (CCI)

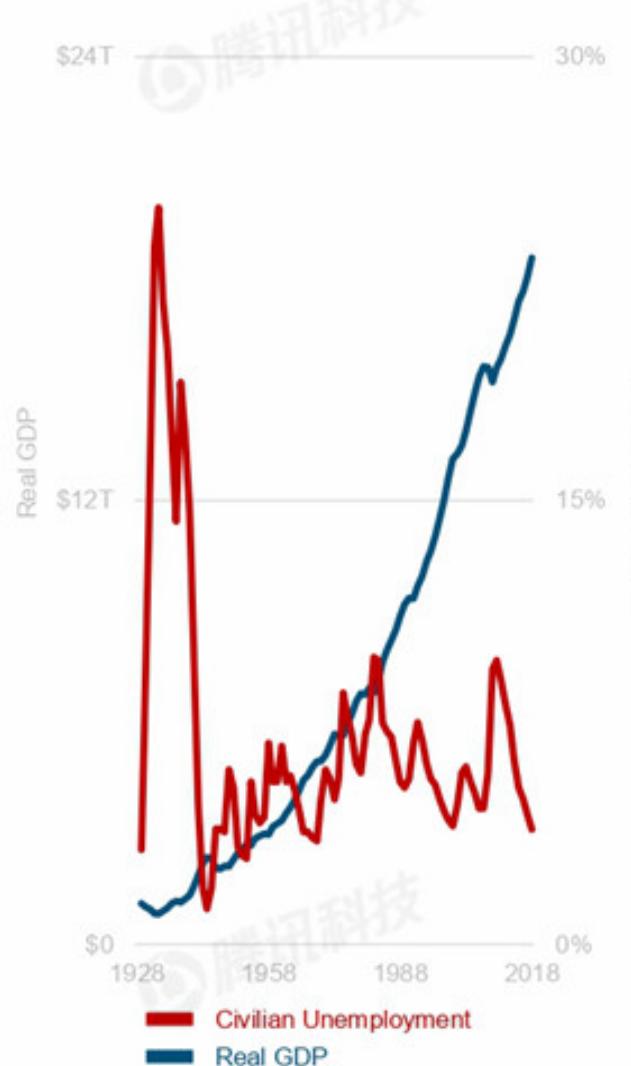


Source: St. Louis Federal Reserve FRED Database. Note: Indexed to Q1:66 = 100. Consumer Confidence Index (Michigan Consumer Sentiment Index) is a broad measure of American consumer sentiment, as measured through a 50-question telephone survey of at least 500 USA residents each month.

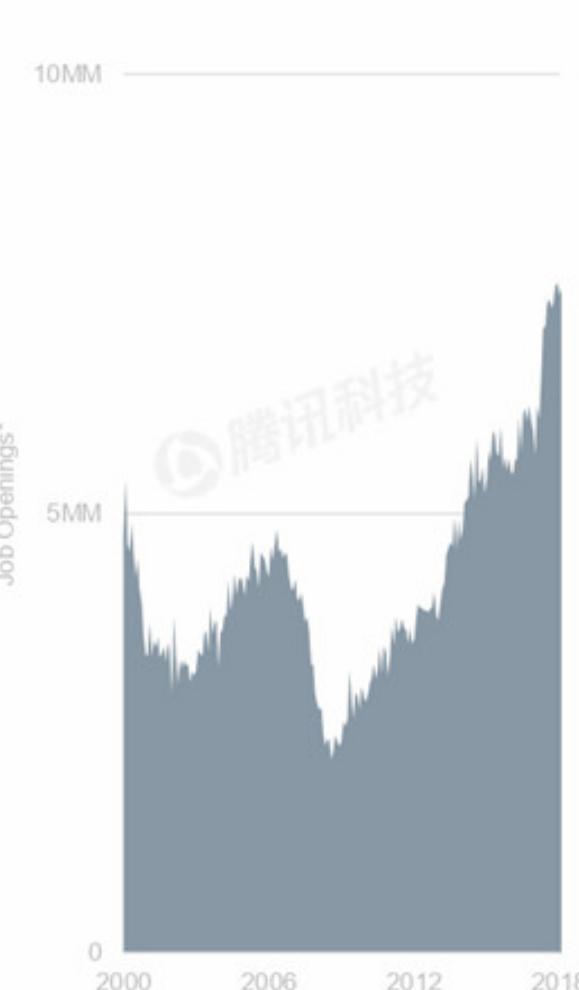
中文版制作: 腾讯科技

经济/就业(美国)：失业率创19年新低 招聘职位数量创历年新高……工资上涨

美国真实国内生产总值VS.失业率



美国招聘职位数量



年龄超过16周岁的美国
所有就业人员真实中位数周收入



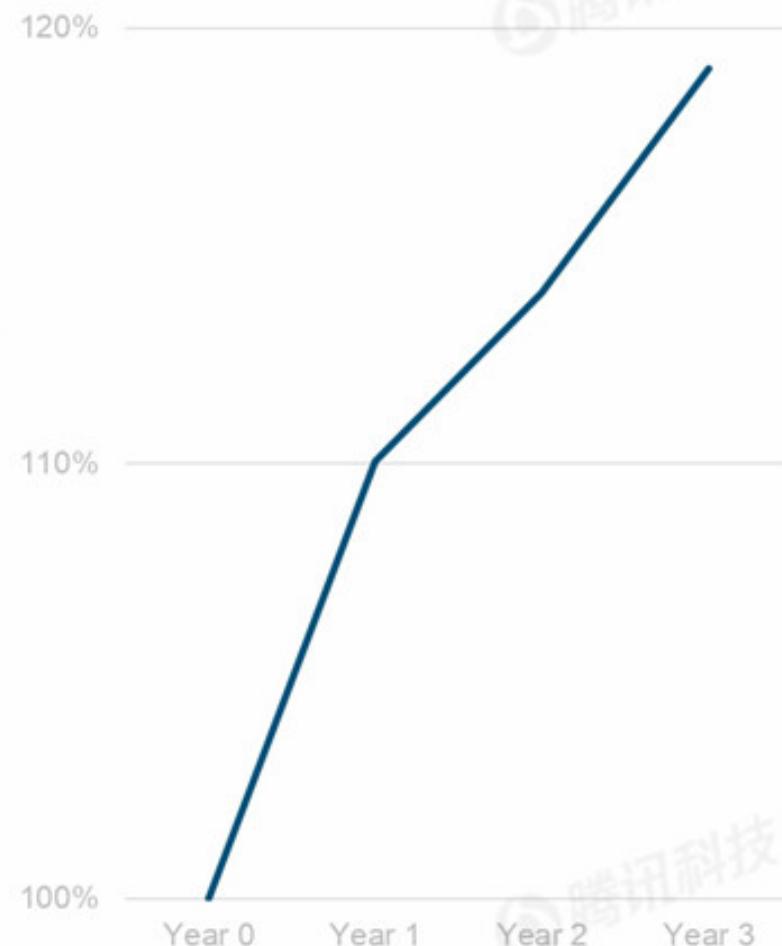
按需工作： 创造可上网的机遇和效率

小型商户启用了支付处理器：强劲增长

腾讯科技
Square的全球跨境支付总量



Stripe Connect-市场容量影响



按需服务：快速增长……本地商户受益

外卖当前占美国8000亿美元年销售的餐厅业务的5%--
我们当前处于按需外卖和服务发展的初期阶段。

我们创办DoorDash是为了帮助本地商户。

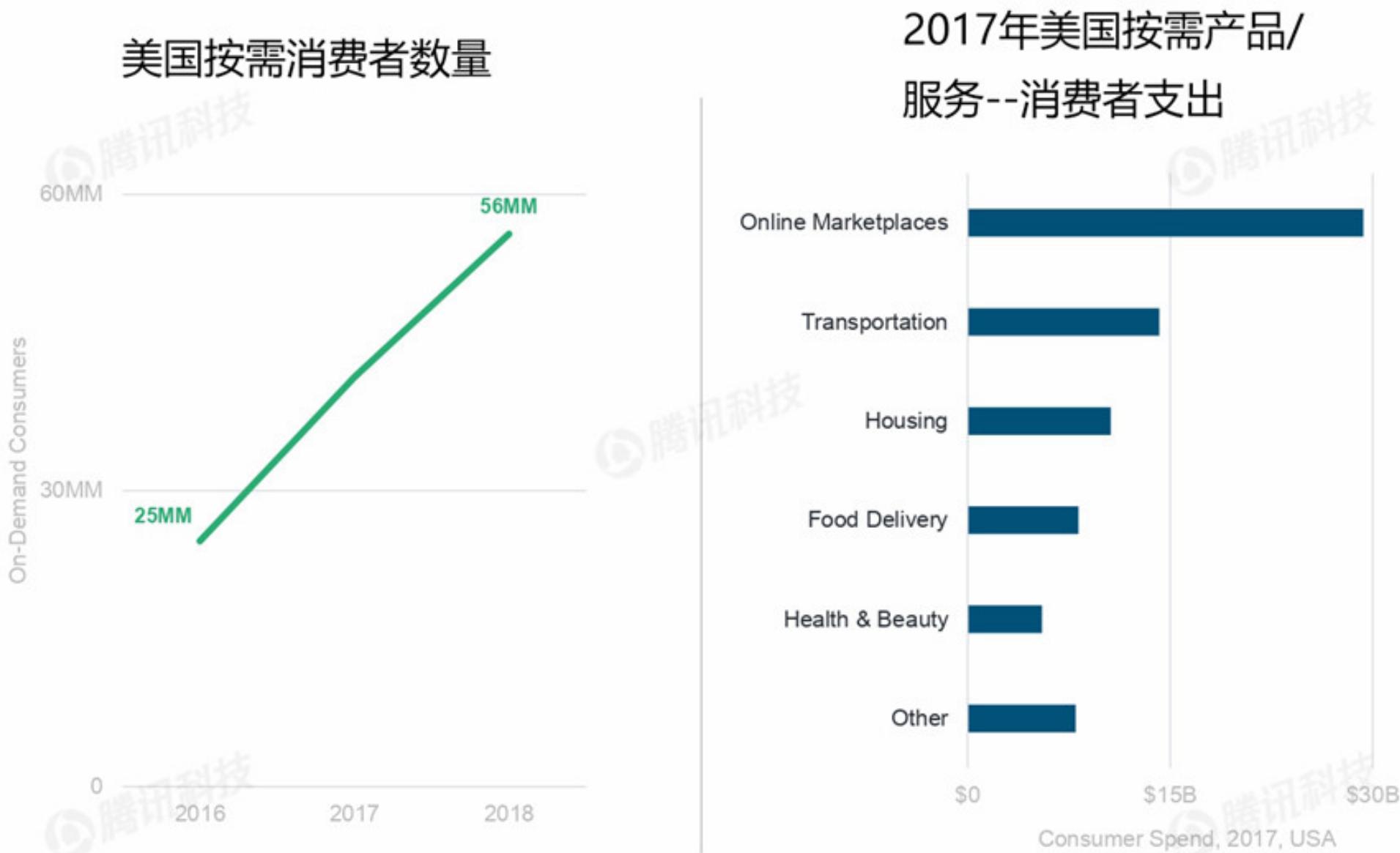
“本地”长期以来一直是电子商务的承诺，
当没有人能帮助本地商户在网络中生存--这是我们关注的领域。

我们的业务旨在帮助本地商户销售便利。

已有大量的商户做好从销售体验向销售便利的转型，
因为后者能够降低他们的成本。我认为这将是商业模式最大的变革。

--DoorDash首席执行官托尼·徐 (Tony Xu)

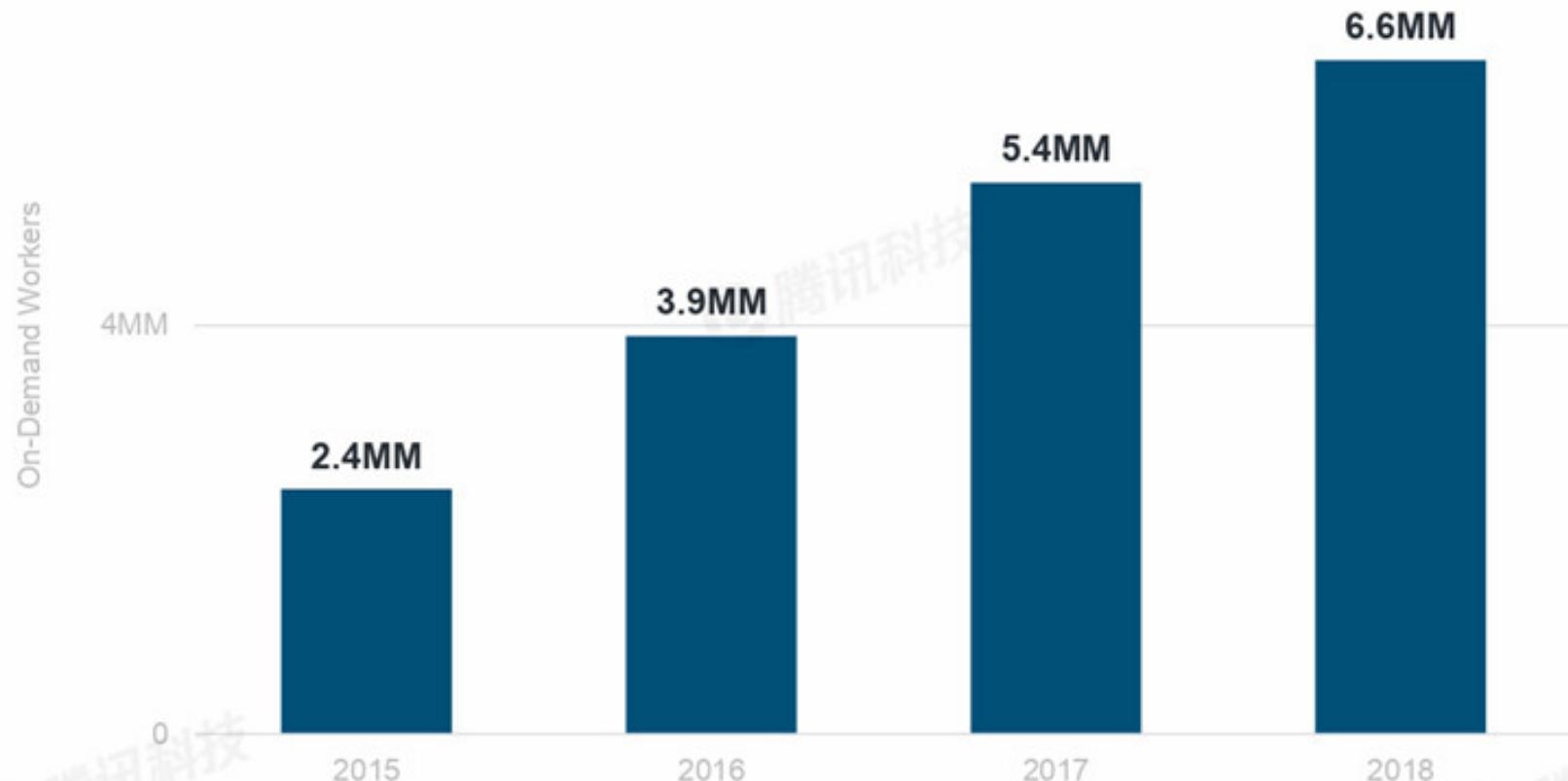
按需消费者数量：5600万+两年增长两倍以上



Source: National Technology Readiness Survey (4/18). Note: authored by Rockbridge Associates, Inc. & A. Parasuraman & C. Mouloua, sponsored by the Center for Excellence in Service, Robert H. Smith School of Business, University of Maryland. The study is conducted online among a representative sample of consumers in a national panel & represents the views of U.S. adults ages 18 & older. The sample size was 1,032 in 2016 & 1,004 in 2017. The margin of error is +/- 3 percentage points. 2018 figures are estimates.

按需工作人员：700万+同比增长22%

美国按需平台工作人员数量



Source: Emergent Research (2015-2018) + Intuit (2017). Note: On-demand workers defined as online marketplace workers including delivery services, food delivery, logistics for people or products, online talent marketplaces, renting out space. Providing other miscellaneous consumer & business services (e.g. TaskRabbit, Gigwalk, Wonolo, etc.). Workers defined as 'active' employees that have done 'significant' on-demand work within the preceding 6 months.

按需工作人员： 自2015年以来Checkr平台收到的简历申请超过2000万份

Checkr按需平台的简历申请

随着按需经济继续改变和转变我们周围的世界，
我们看到新的、补充型工作正在快速出现。
此类工作越来越成为经济增长的主推动力。

Checkr在按需经济中处于前排，
不仅能够注意到未展示出的变化，
并且还提供了强化它的解决方案。
我们的技术被用户向雇主提供选人决策帮助，
帮助他们扩大自身的业务。

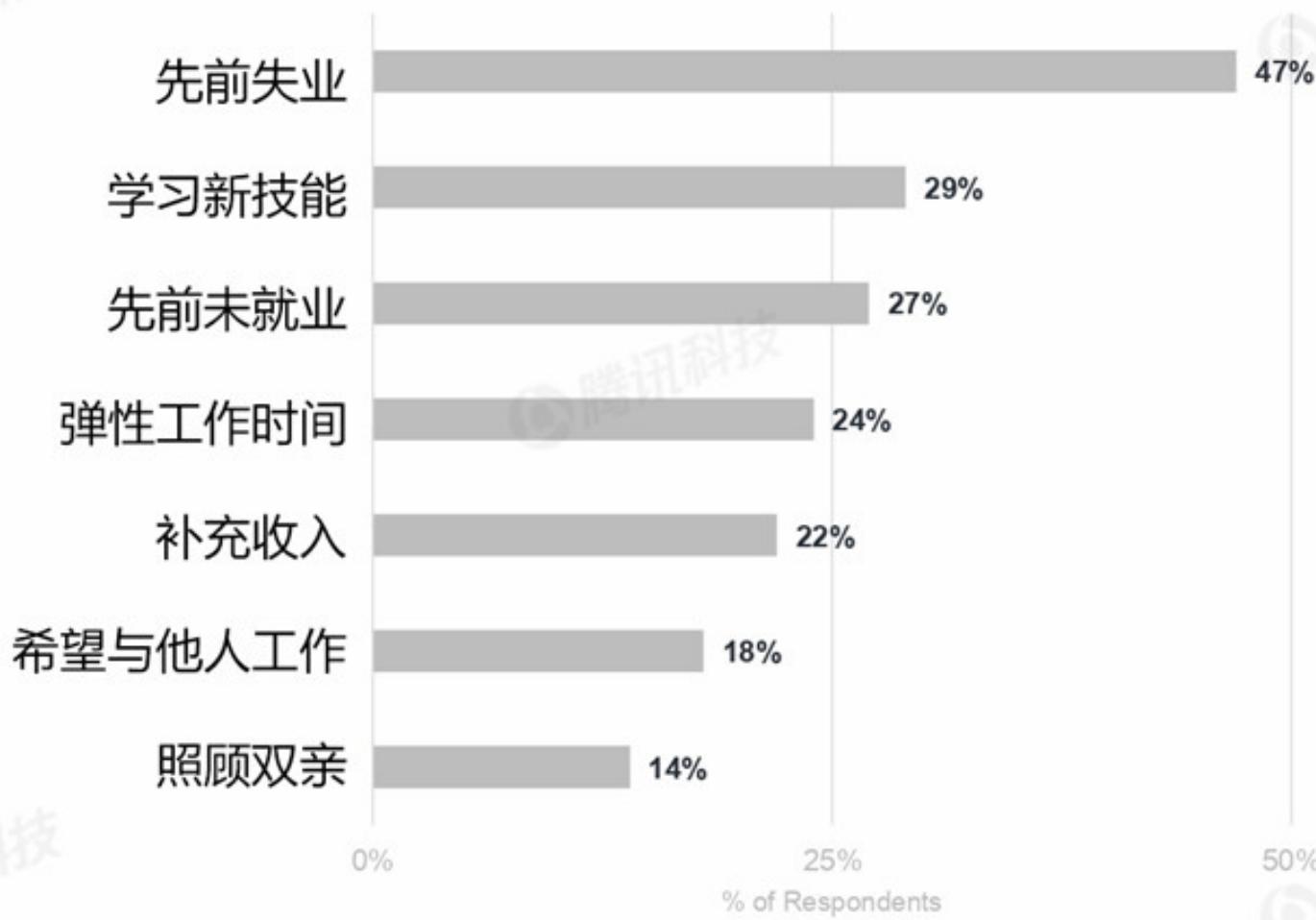
--Checkr联合创始人、首席执行官丹尼尔·雅尼斯



Source: Checkr (2019)

按需工作： 创造互联网优势

按需工作-动机，美国



Source: Wonolo (7/18). N = 1,400 survey respondents

按需平台：用户数量众多+高速增长

即时平台

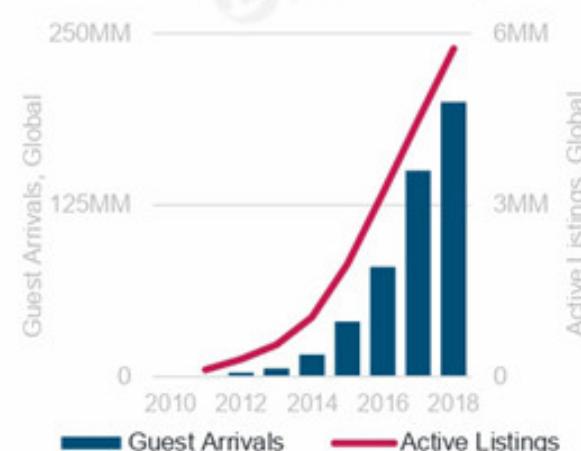
Uber @ 4MM Driver-Partners



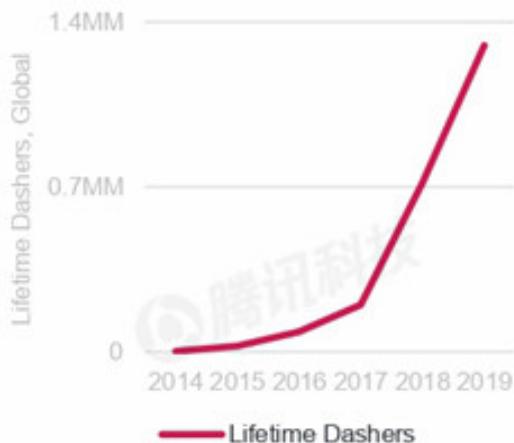
Etsy @ 2MM Sellers



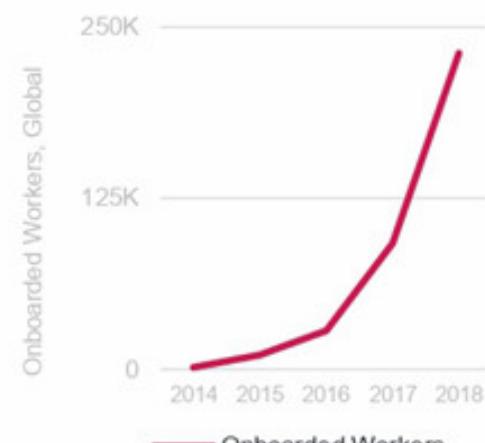
Airbnb @ 6MM Listings



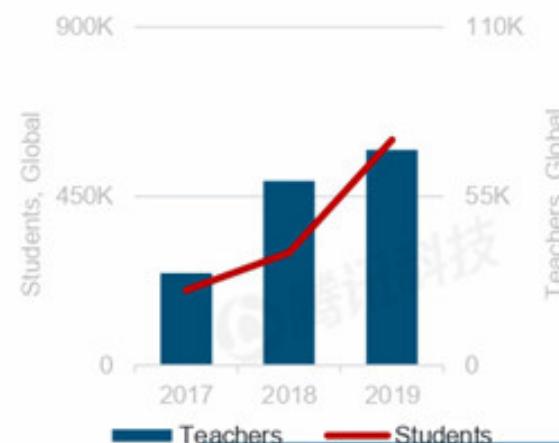
DoorDash @ 1.3MM Dashers



Wonolo @ 230K Workers



VIPKid @ 70K Teachers

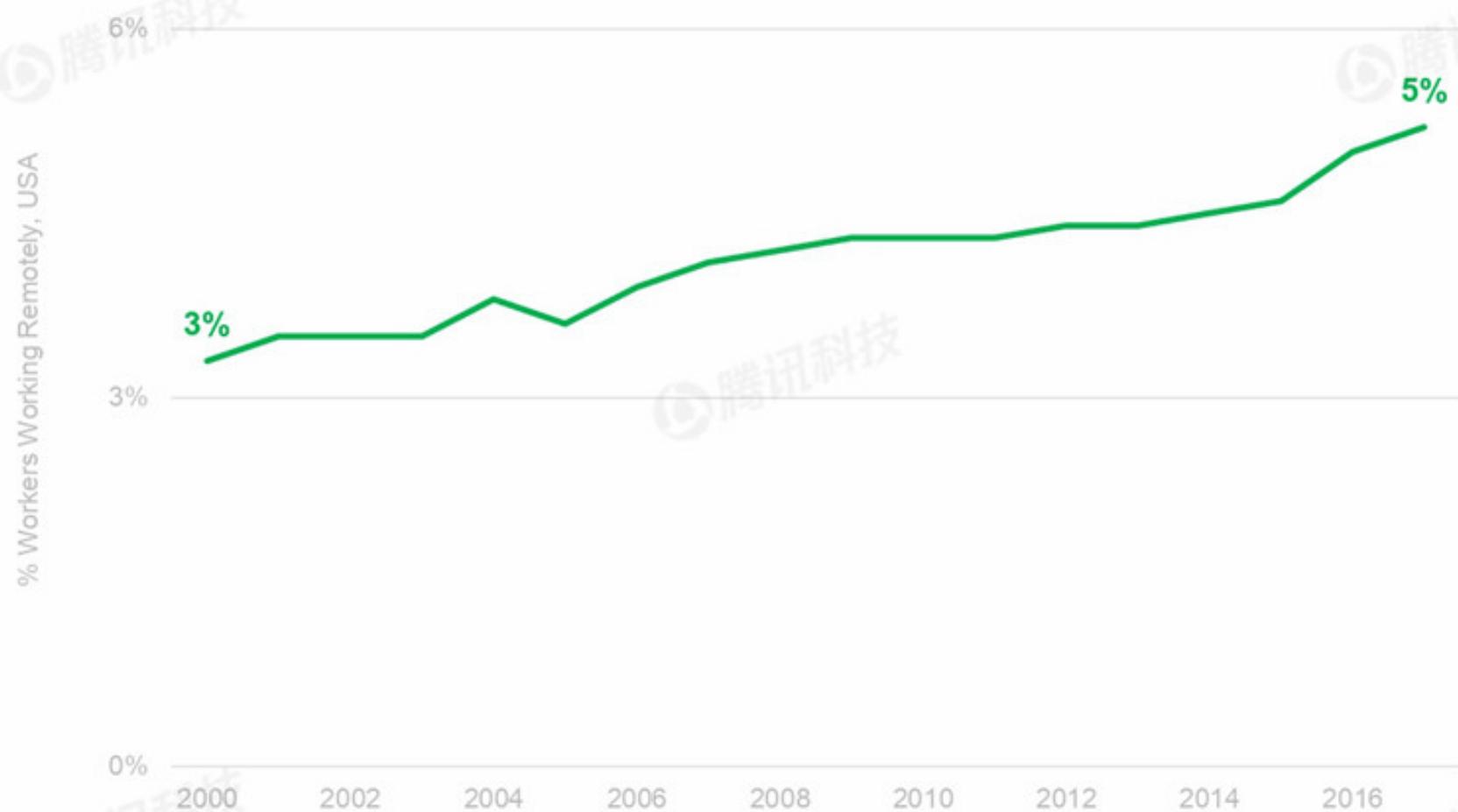


远程工作：创造互联网工作 机遇+效率

中文版制作:  腾讯科技

远程工作者：数量增长

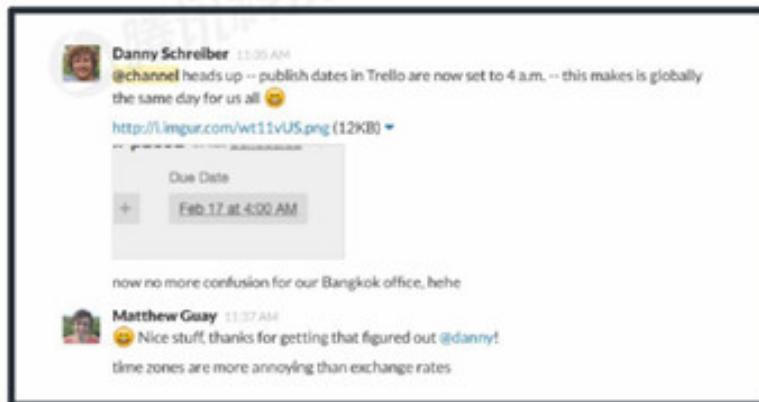
远程工作者占美国总人口的比例



Source: USA census Bureau American Community Survey (ACS) (2000-2017). Note: The US Census releases the ACS survey in September for the previous year. ACS = Survey of ~3.5MM Americans over the course of a year.

远程工作者：得益于在线协作工具

Remote Workforce (Zapier)



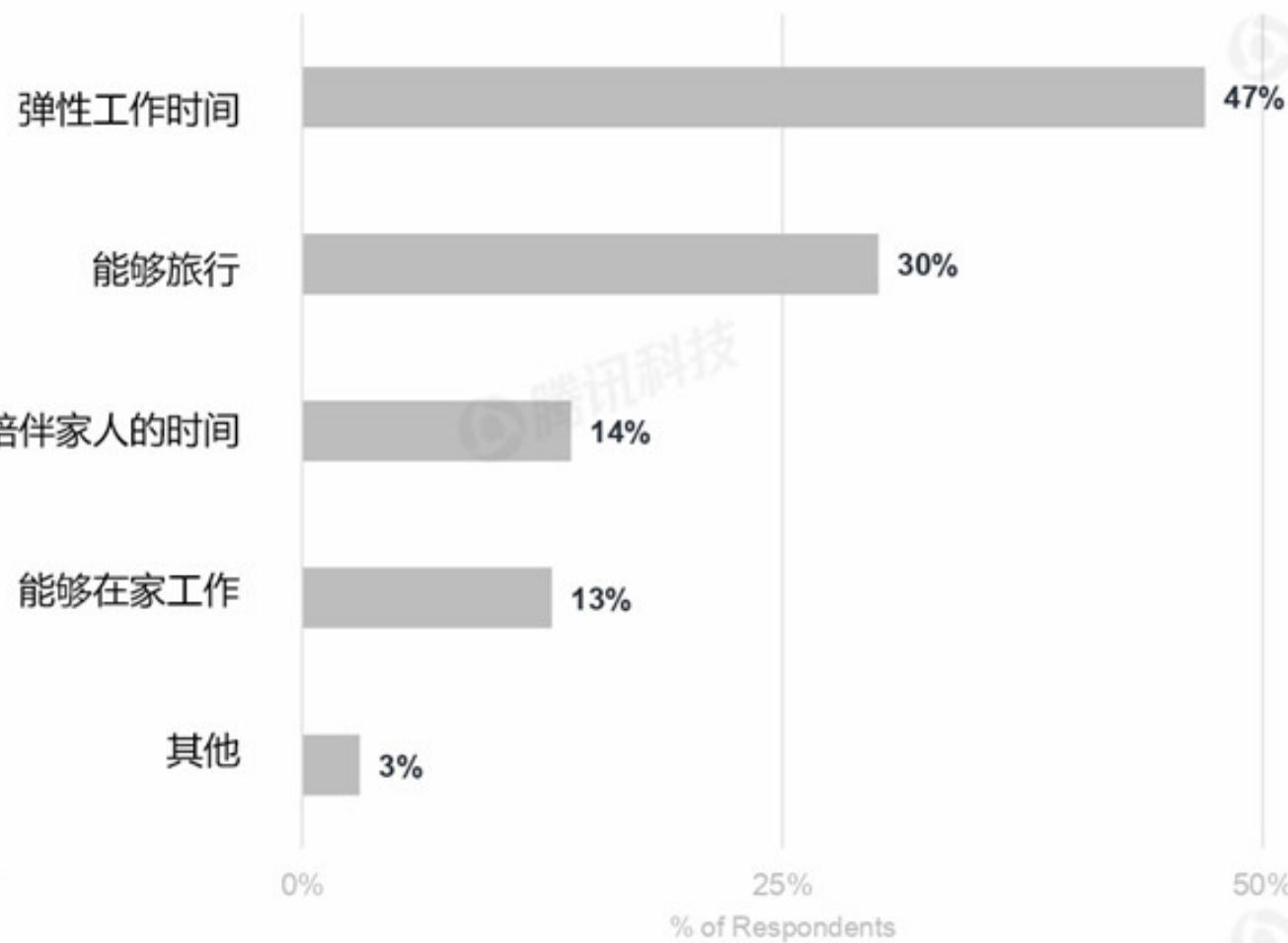
在Zapier，我们发现无论团队成员身处何地，
使用一大堆能够配合使用的协作工具，
能够让远程团队100%的更有效的工作。
在共享文档中相互协作，或是进行即时聊天对我们至关重要。
拥有非常好的联网工具和程序，
所有远程雇主会发现员工更专注、生产率更高。
--Zapier联合创始人、首席执行官韦德·福斯特

By Remote Teams	1/18-1/19
1) Slack	+42%
2) Google Sheets	+59%
3) Airtable	+37%
4) Help Scout	+101%

Source: Zapier (6/19). Note Y/Y growth refers to growth in engagement with productivity tools from January 2018 to January 2019 specifically at remote teams who use Zapier for automation.

远程工作：创造互联网优势

远程工作的优势



Source: Buffer in partnership with Doist, Hubstaff, Remote-How, RemoteYear, Trello, Workfrom & We Work Remotely, State of Remote Work 2019. N = 2,471 respondents globally.

工作 (通过Zoom)



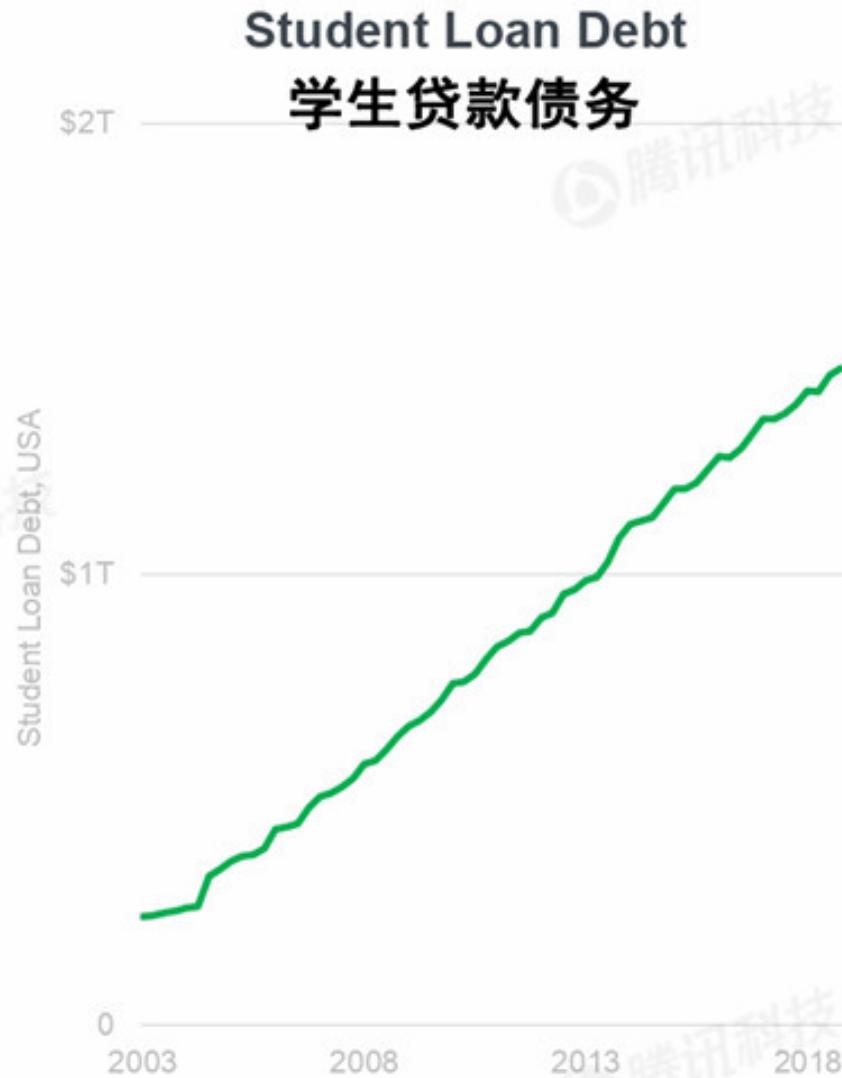
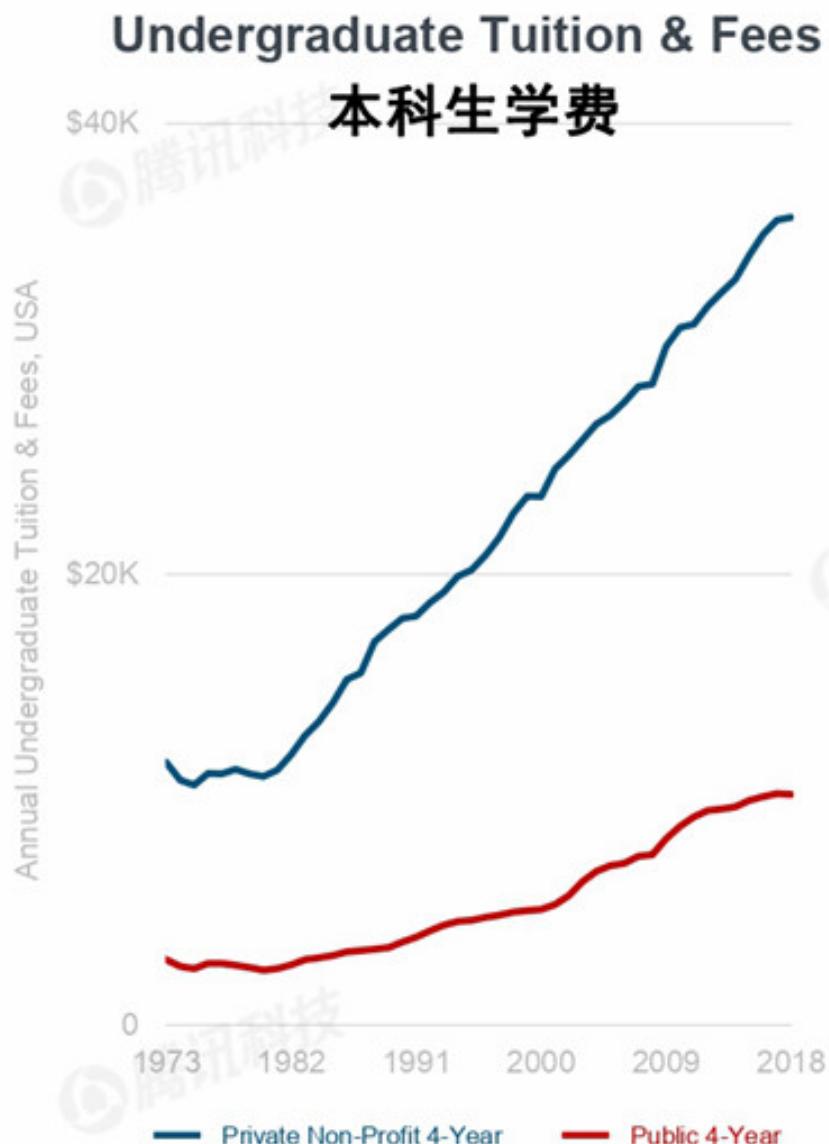
游戏 (通过Frotnite)



在线教育 数量庞大 + 大幅增长

教育成本（美国）

教育成本：上涨

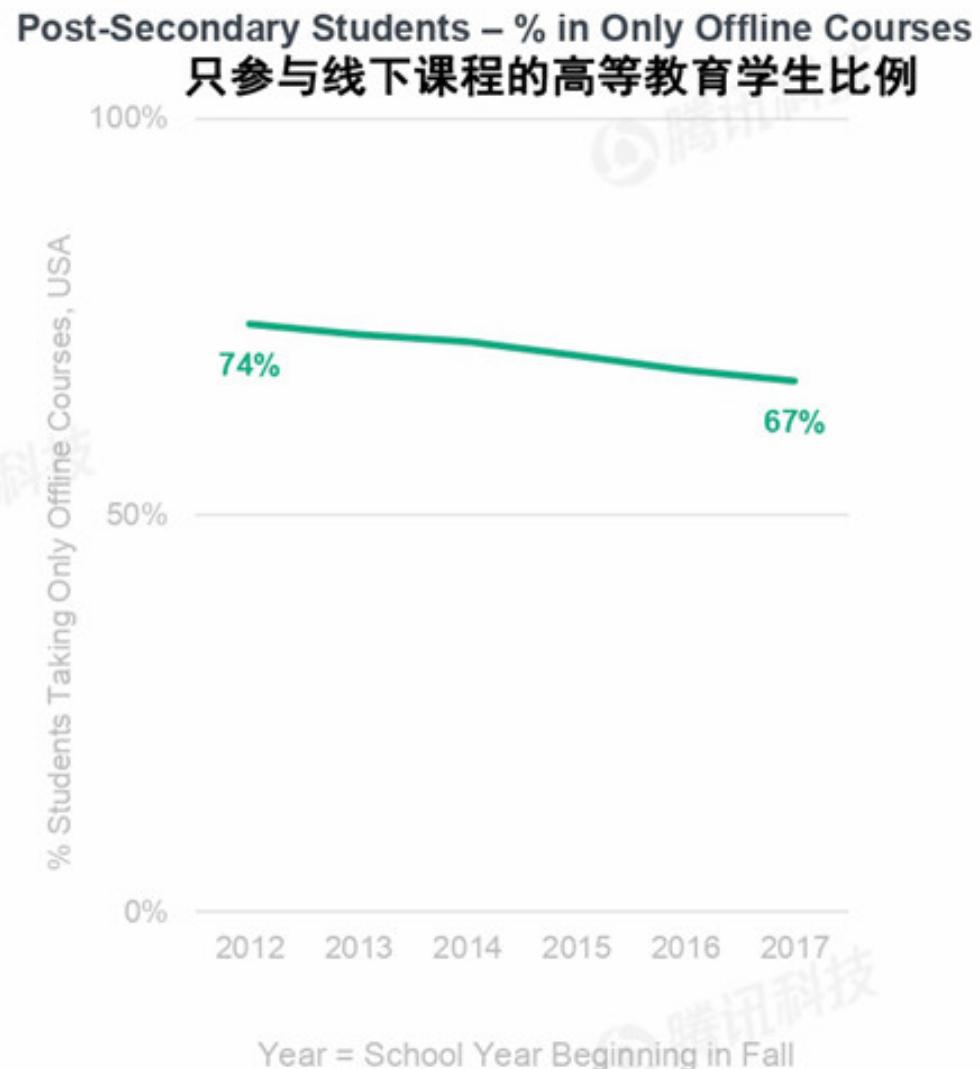
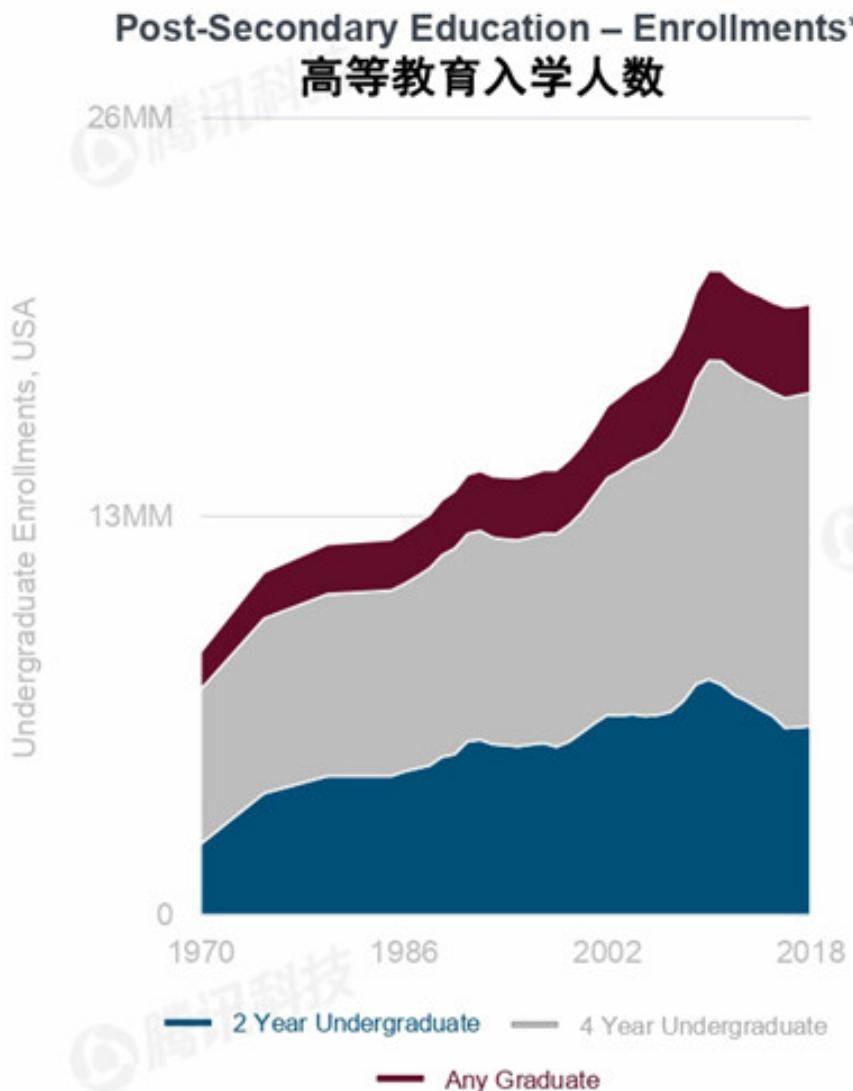


Source: Tuition & Fees = College Board, Annual Survey of Colleges; NCES, IPEDS Fall Enrollment data. Average tuition & fee prices reflect in-district institutions & in-state charges for public four-year institutions. All figures in 2018 dollars. Debt = College Board, Annual Survey of Colleges; NCES, IPEDS Fall Enrollment data. Average tuition & fee prices reflect in-district charges for public two-year institutions & in-state charges for public four-year institutions. All figures in 2018 dollars.

Post-Secondary Education Enrollment (USA)

美国高等教育入学人数

线下教育入学人数：增长缓慢



Online Education / Learning =

Offline Institutions Expanding Reach

**在线教育/学习：
离线机构扩大触及范围**

在线教育入学：跨越大学的不同基础

Top 50 USA Post-Secondary Online Enrollment Leaders (2017) 2017年美国在线高等教育机构50强

Public

Institution	Enrollment
University of Maryland	51K
University of Central Florida	36
Ivy Tech Community College	35
Arizona State University	31
University of Florida	31
Florida International University	30
Lone Star College System	23
University of South Florida	22
University of Texas Arlington	21
Houston Community College	19
Valencia College	18
California State – Northridge	17
St Petersburg College	16
Texas Tech University	16
Penn State University – Main	16
College of Southern Nevada	15
Kent State University	15
Florida State University	15
University of Houston	15
University of Cincinnati	14
University of Illinois at U-C	14
Ohio State University – Main	14
Penn State University – World	13
University of North Texas	13
Utah State University	13
N. Virginia Community College	13
University of Arizona	13
Northern Arizona University	13
California State – Fullerton	13
Total Enrollment	576K

Private – For Profit

Institution	Enrollment
University of Phoenix – Arizona	129K
Grand Canyon University	69
Walden University	53
American Public University System	49
Ashford University	41
Capella University	38
Kaplan University – Davenport	37
Colorado Technical University	25
Chamberlain College of Nursing	24
Columbia Southern University	23
Full Sail University	21
DeVry University-Illinois	19
Total Enrollment	528K

Private – Not For Profit

Institution	Enrollment
Western Governors University	84K
Liberty University	68
Southern New Hampshire U.	64
Excelsior College	42
Brigham Young University	36
Ultimate Medical Academy	16
Embry-Riddle	13
National University California	13
Total Enrollment	336K

BOND
Internet Trends
2019

Source: Babson Survey Research Group Grade Increase: Tracking Distance Education in the United States (2017)

中文版制作: 腾讯科技

在线教育课程： 顶级离线机构加码在线课程

Degree Programs @ Top Institutions Moving Online via Coursera 越来越多的大学通过在线学习平台COURSERA提供学位项目

2016

2017

2018

2019

University of Illinois

Master of Business Administration
Master of Computer Science

HEC Paris

MSc of Innovation & Entrepreneurship

Arizona State University

Master of Computer Science

University of Pennsylvania

Master of Computer Information & Technology

University of Illinois

Master of Science in Accountancy

University of London

Bachelor of Science in Computer Science

Macquarie University

Global MBA

University of Michigan

Master of Public Health
Master of Applied Data Science

Imperial College London

Master of Public Health
Master of Applied Data Science

University of Colorado Boulder

Master of Science in Electrical Engineering

Source: Coursera (6/19). Note: Data reflects first year of program offering of active programs on Coursera.

...Online Education / Learning Platforms =

Scaling ... Different Shapes & Sizes

**在线教育/学习平台：
规模化……不同的形式和规模**

在线教育项目经理：2U

Online Graduate Programs
在线毕业生项目

2U – Post-Secondary (USA)

2U--高等教育（美国）

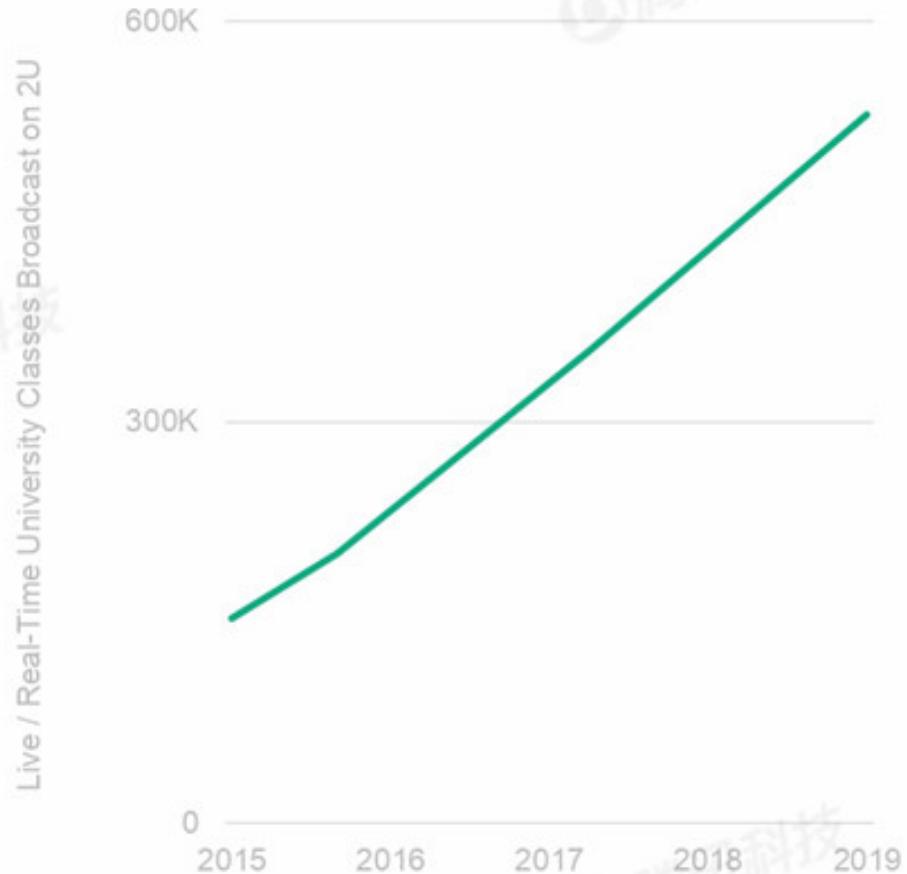
Cumulative Classes Broadcast
累积课程播放次数



如果你能从互联网上的经历中获得正常的一切，你为何要重新开始生活，辞掉工作，去上学呢……但不牺牲学生和教职员员工或同学之间的关系质量或水平。

你能够成为这个社区的正式成员，获得同样的学位和相同的访问级别。

--2U联合创始人、首席执行官克里斯托弗·波西克



Source: Goldman Sachs Investment Research (5/18). Christopher Paucek Interview with Code (11/18).

Online Education Marketplaces = Coursera...

Coursera – Post-Secondary (Global) COURSERA--高等教育(全球)

Top Courses, 2018

2018年顶级课程

- 机器学习
- 学习如何学习：
- 帮助你掌握难学科目的强有力的智力工具
- 健康科学
- 比特币与数字加密货币技术
- 算法第一部分
- 职业发展英语
- 金融市场
- 心理学介绍
- COMO HACER UNA TESIS
- 初学者汉语

Learners 学习人数



Learners by Geography



Source: Coursera. Note: Course popularity based on average daily enrollments. Graph shows learners as of 12/18.

中文版制作: 腾讯科技

在线教育市场：UDEMY

Udemy – Continuing Education (Global)

UDEMY--继续教育(全球)

Education Marketplace 教育市场

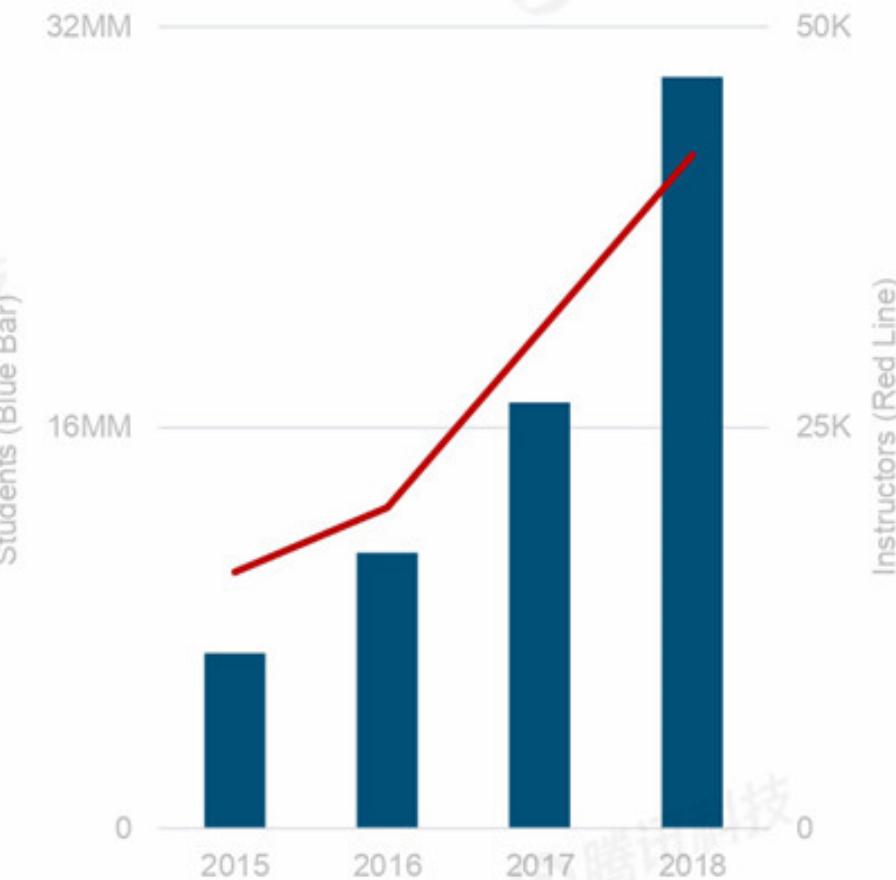
200MM+ Enrollments in 100K+ Courses



从成立的第一天起，我们就希望能够创造一个目的地，
让任何人以可接受的价格学习技能改善生活。
鉴于我们绝大多数的学生希望把学到的知识用于工作，
我们一直专注于通过超过3000门专注于工作技能的课
程打造企业解决方案。这一直是我们业务成长最快的
一部分，自2015年以来用户数量增长了13倍之多。

--UDEMY联合创始人艾伦-巴利

Instructors + Students 讲师+学生数量



Source: Udemy (5/19).

在线教育（毕业后收入分享）：Lambda学校

Lambda学校--高等教育（全球）

收入分享协议



传统的高等教育模式将金融风险转嫁给学生。

因为学费需前期支付，大学未受到帮助学生取得成功的激励。

Lambda学校采用了不同的做法。

只有我们的学生取得成功，我们才能取得成功。

通过我们的毕业后收入分享模式，

学生只有在找到年薪为5万美元之上的工作时才需支付学费。

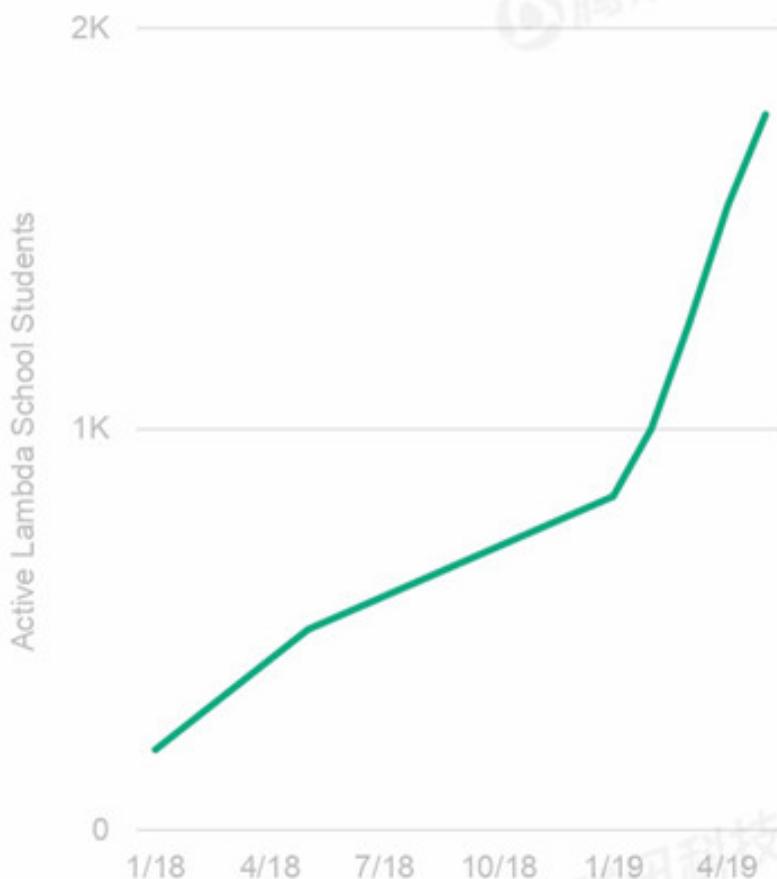
通过与学生签订这种协议，我们消除了财务风险。

最终，我们帮助有天赋的人完善他们的技能，

并让优秀的人获得相匹配的高薪职位。

--Lambda学校联合创始人、首席执行官奥斯腾-埃尔德

学生数量



在线教育学习工具：Chegg

Chegg--高等教育(美国)

订阅式教育支持

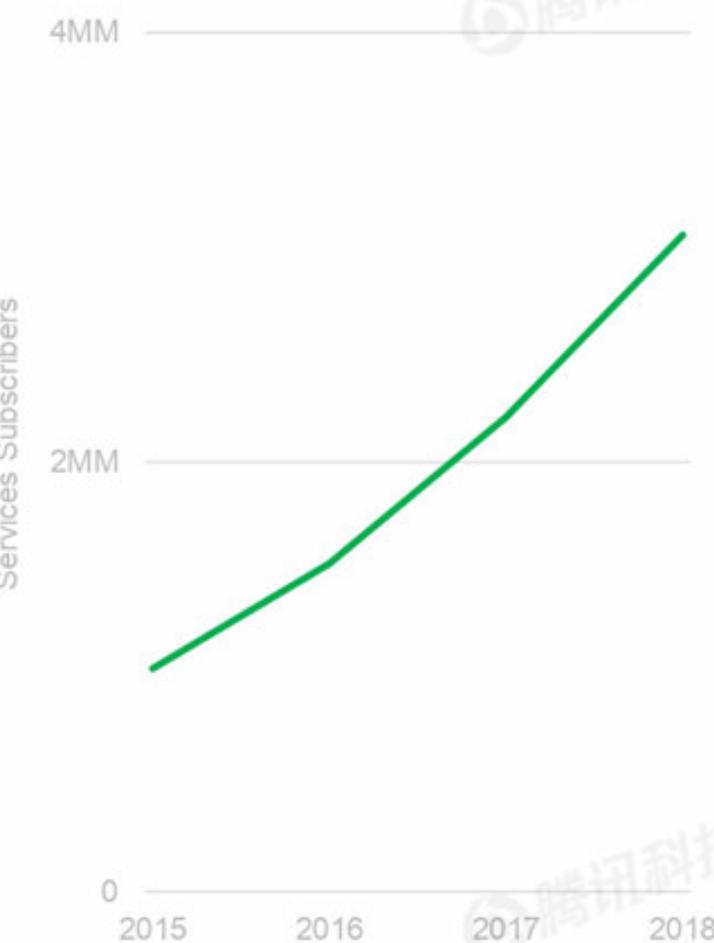
The screenshot shows a Chegg search results page for 'aniline'. A specific question in chemistry is highlighted: "Can someone explain the steps for answering this problem please? I can't tell if the NH₂ is supposed to be the connector of the propionic acid with it aniline to make an amine, or if the NH₂ becomes a substituent to the benzene if which becomes a substituent to the propionic acid..." Below the question, there's a "Best answer" from a user named "jasonm1993" with a 5-star rating. The answer explains the reaction between propionic acid and aniline to form N-(propionyl)aniline, accompanied by a chemical reaction diagram.

*If you learn better by just walking through the steps,
if you learn better by asking questions, if you learn better
by watching videos, we teach you that way.*

*We are constantly expanding the way we can
teach you & the subjects that we're available for,
the speed in which we can get you the answer back,
the format in which you can consume it.*

Dan Rosensweig – CEO, Chegg, 2/19

服务订阅用户数量

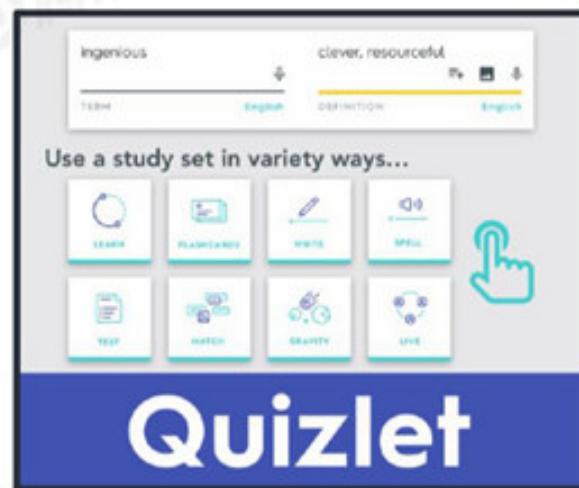


Source: Chegg, Dan Rosensweig presenting @ Morgan Stanley Technology, Media, Telecom Conference (2/19).

在线教育学习工具：Quizlet

Quizlet--消费者学习（全球）

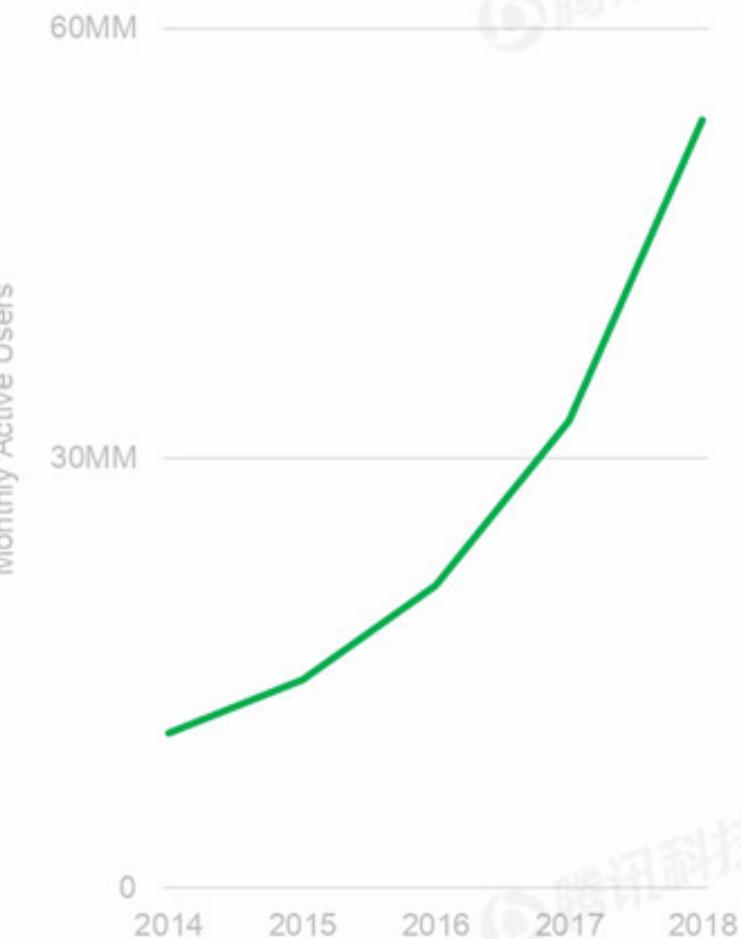
客户化的学习工具



We recognize that technological innovation will continue to evolve jobs of the future. Educators have the power to equip students with evergreen skills that will always be necessary in a career, like learning how to learn & fostering a sense of curiosity to take throughout life. Students can really benefit from teachers setting a precedent that ongoing learning is normal & healthy so that incoming employees are agile & able to take on whatever comes their way.

Matthew Glotzbach – CEO, Quizlet, 4/19

月活跃用户数量

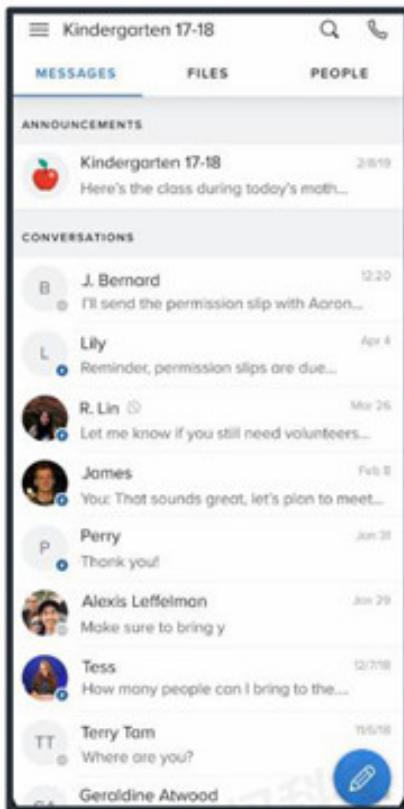


Source: Quizlet eCampus News Interview (4/19).

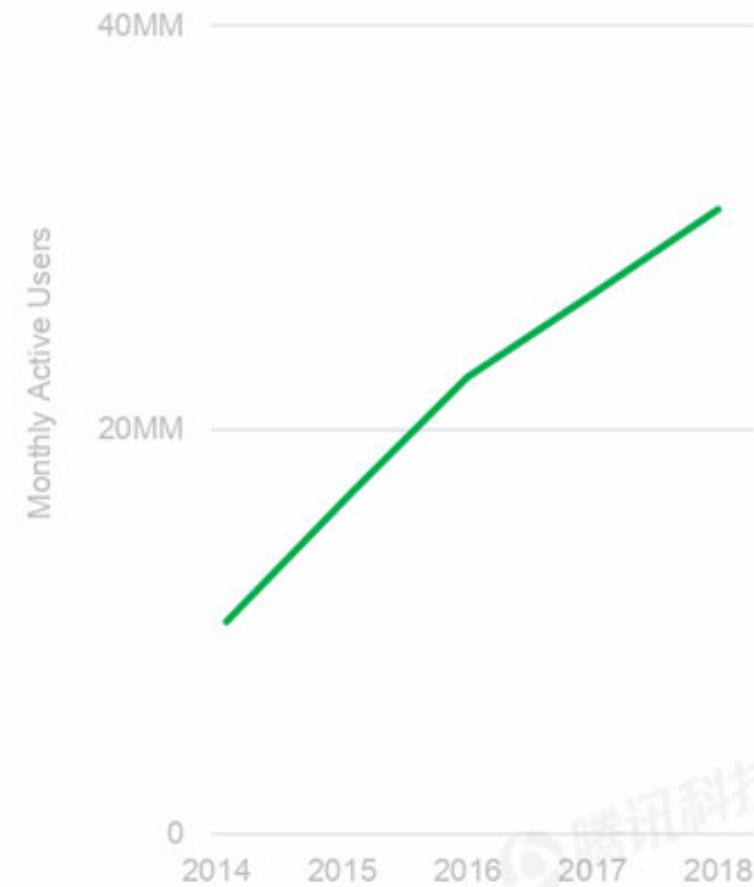
在线教育学习工具：Remind

Remind--K12+高等教育（北美）

教师-学生-家长通讯



月活跃访问用户数量



Source: Remind (6/19). Peak total monthly active users. Consists primarily of USA + Canada users.

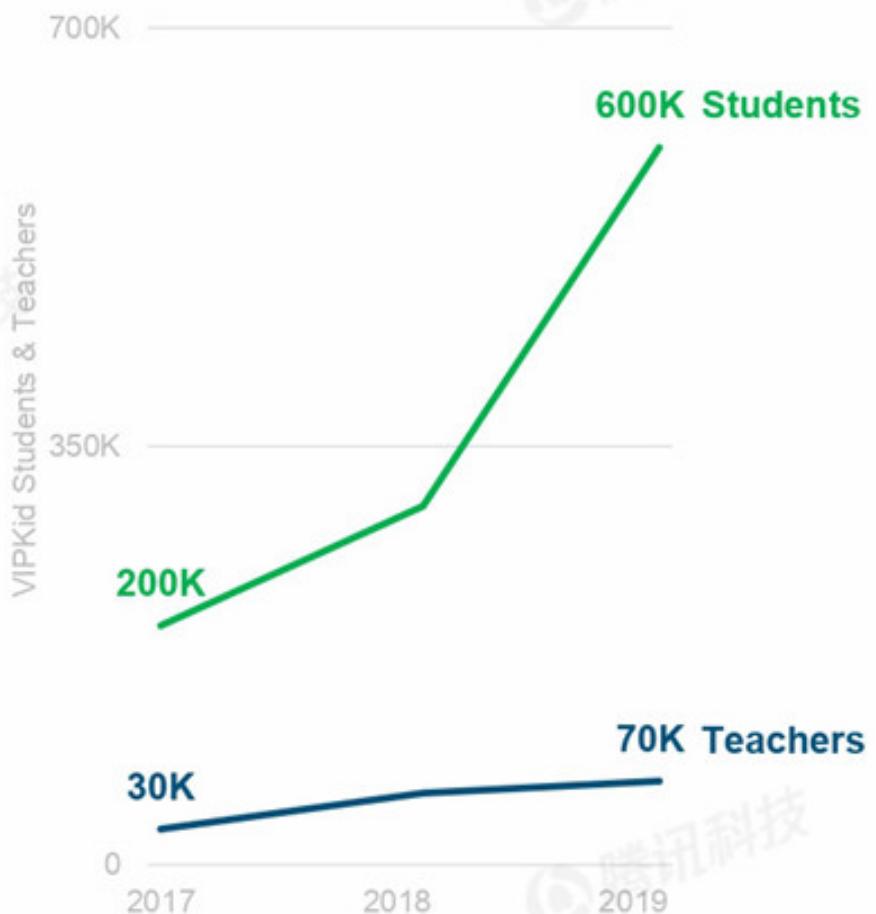
在线教育（远程视频聊天）：VIPKid

VIPKid--学生年龄4至15岁（中国）+教师（北美）

远程语言指令



学生+教师数量

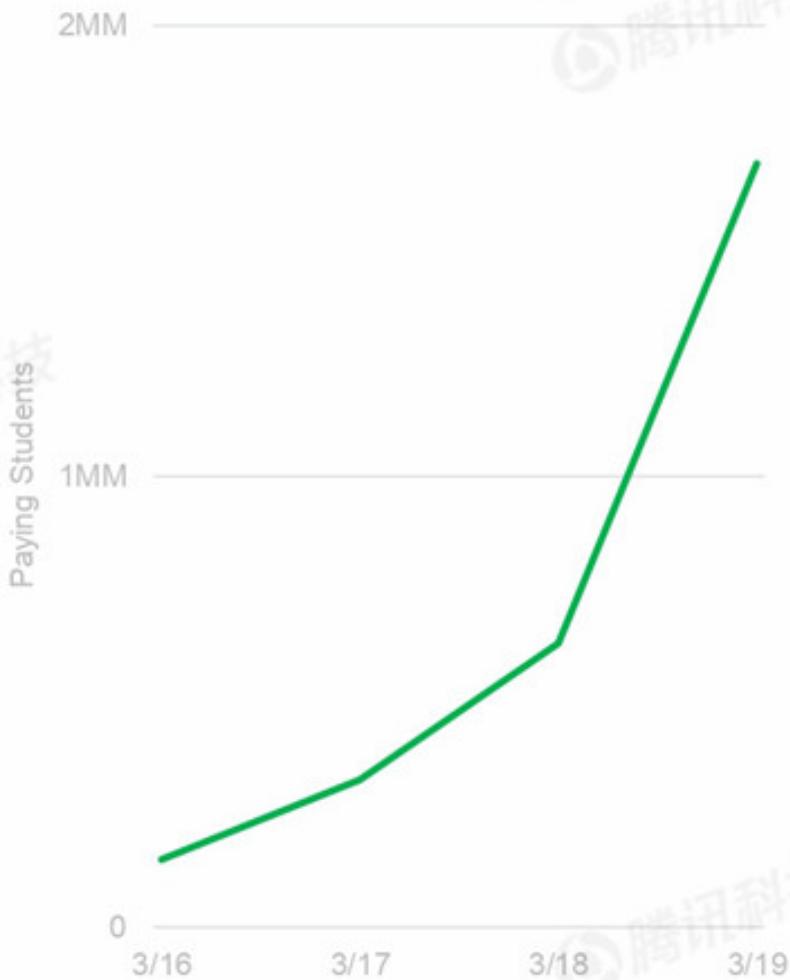


在线教育（虚拟教室）：印度教育科技公司Byju's

Byju's ——面向9到17岁的学生（印度）



付费学生人数



Source: Byju's (5/19)

在线学习（广泛基于视频）：YouTube教育内容

YouTube

特定教育渠道的订户人数

45亿

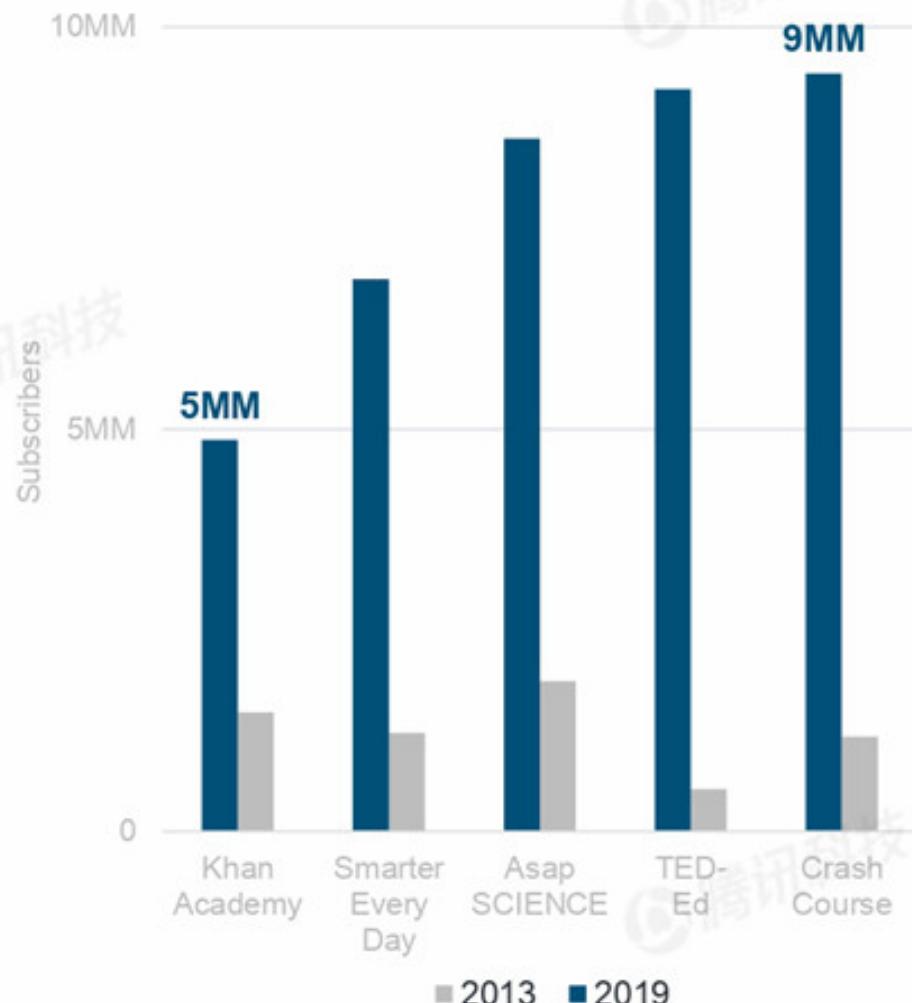
“操作指南” 视频收视率的年度小时数

超过2亿

Booktuber 内容的收视次数

59%

Z世代用户将YouTube作为首选学习工具



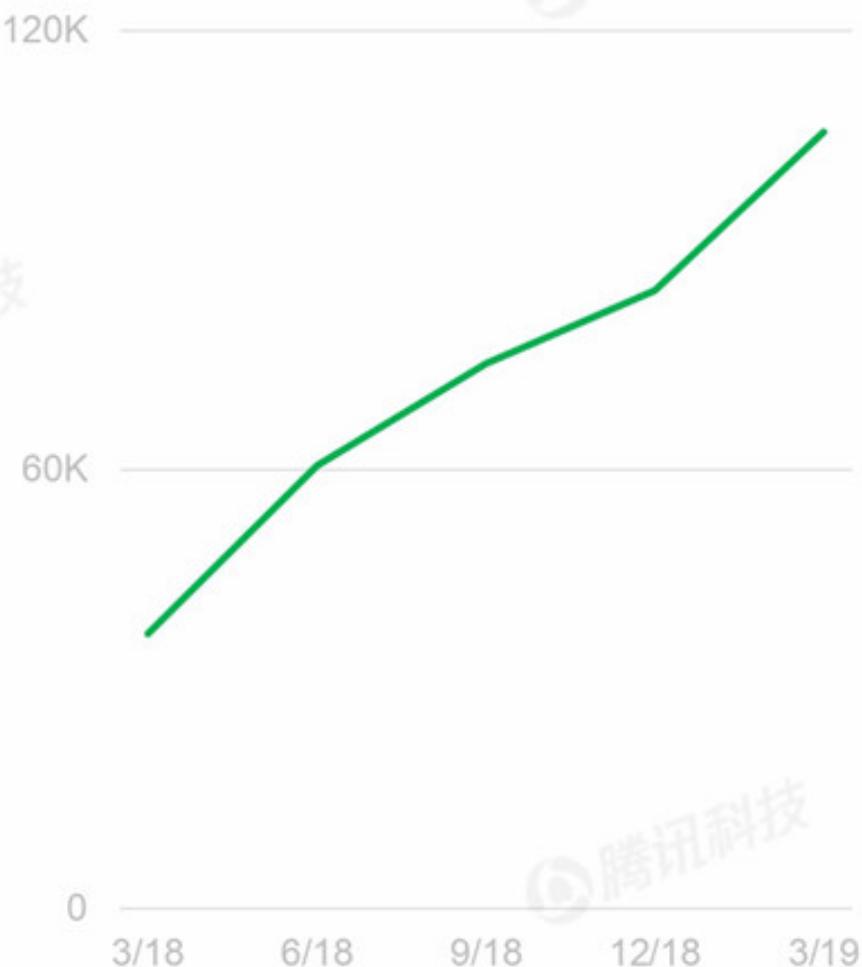
Source: Google / YouTube (5/19), Pearson / The Harris Poll Beyond Millennials: the Next Generation of Learners survey (8/18). Survey of 2,587 USA respondents ages 14-40 years old. Note: Hours of 'How-To' videos are for the year 2017 and represent videos with 'How-To' in the title. Booktubers are content creators that share book reviews & discussion groups on YouTube. Views are cumulative.

在线教育（工作相关技能） 谷歌：按需工作岗位的证书

与谷歌一起成长:IT支持专业证书

- 49美元
Coursera课程的每月费用
- 8个月
完成课程平均所需时间
- 1万以上
从谷歌获得财务支持的学员人数

Coursera : 累计课程注册人数



Source: Coursera (6/19).

在线教育（工作相关技能）

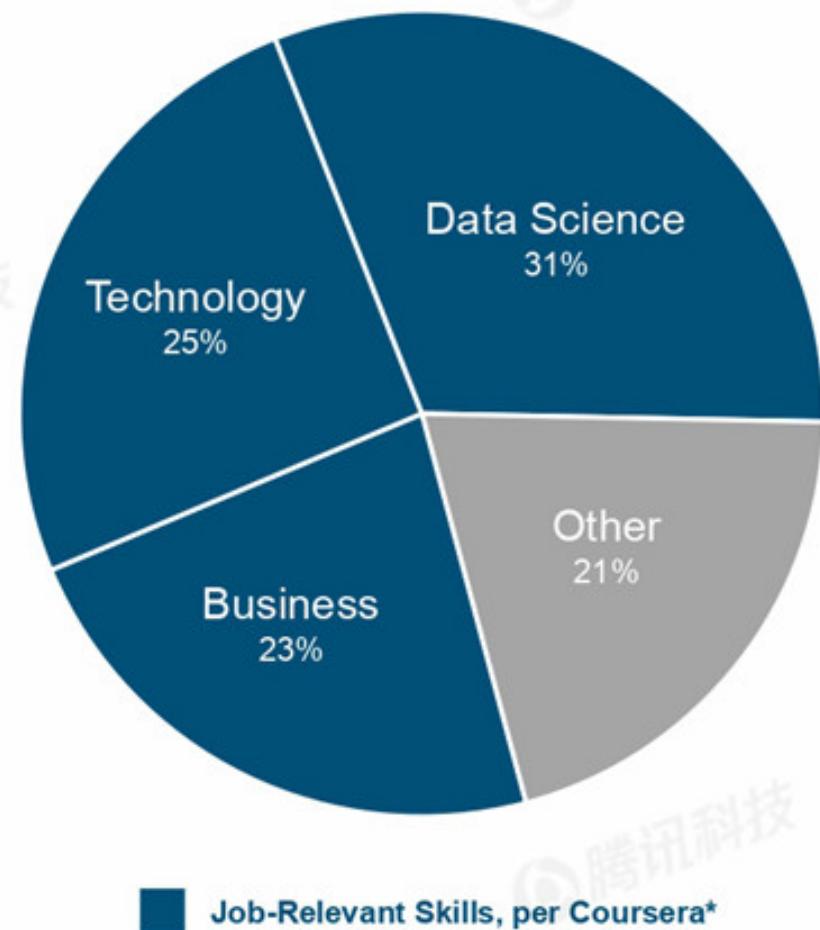
Coursera: 80%营收来自商业、科技、数学科学

Coursera

2018年最受欢迎的专门课程

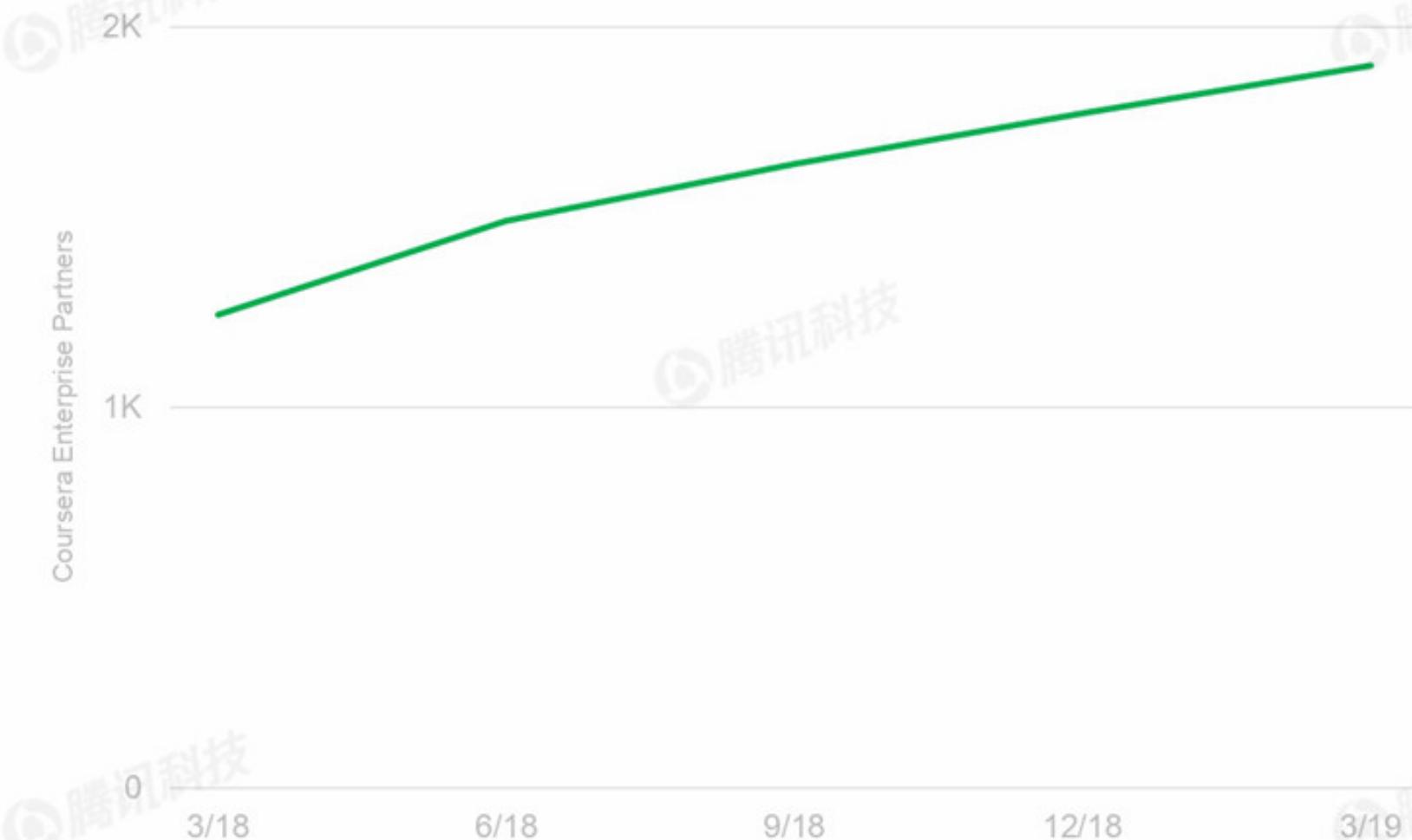
- 深度学习 (deeplearning.ai)
- Python for Everybody (密歇根大学)
- 数据科学 (约翰霍普金斯大学)
- 来自Python的应用数据科学 (密歇根大学)
- 谷歌IT支持专家证书 (谷歌)
- 高级机器学习 (俄罗斯国立高等经济学院)
- 改善应用沟通技能 (乔治亚理工学院)
- 商务基础 (宾夕法尼亚大学)
- 谷歌云平台架构设计 (谷歌云)
- Excel商用技巧 (麦考瑞大学)

2018年按课程领域划分的消费者学员收入



在线教育（工作相关技能） 技能打造：雇主提供的技能越来越多

Coursera企业合作伙伴



Source: Coursera (6/19). Note: a Coursera enterprise partner is a company engaged with Coursera to provide employee skillbuilding programs.

中文版制作: 腾讯科技

在线教育

学员兴趣很高

学员保留率/课程完成率各不相同

在线学习(大规模开放式在线课程——MOOCs)强劲增长 课程完成率/学员保留率各不相同

Coursera – 2018年课程完成率

不要求学位的消费者

100%

50%

0%

Unpaid
Learners

50%
Paid
Learners

企业

44%

Enterprise
Learners

要求学位的消费者

89%

Paid Degree
Learners

Source: Coursera (6/19). Note: Completion rate refers to the number of students that finish a course vs. the number that began the course.

中文版制作: 腾讯科技

在线教育

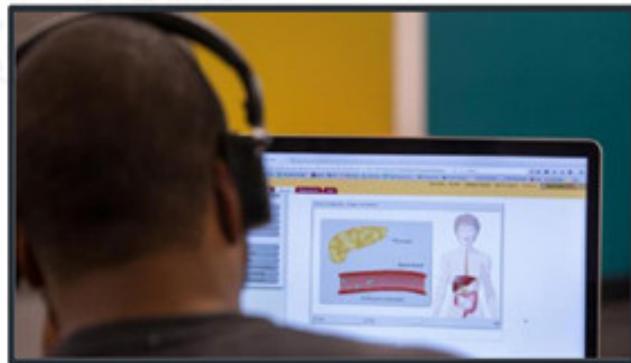
更多增长+更多用户+更多选择

对消费者来说成本较低

在线教育成本：与线下教育相比成本可能更低

亚利桑那州立大学

在线教育课程/工具



降低成本的关键是引进技术以及帮助学生成功的新方法。

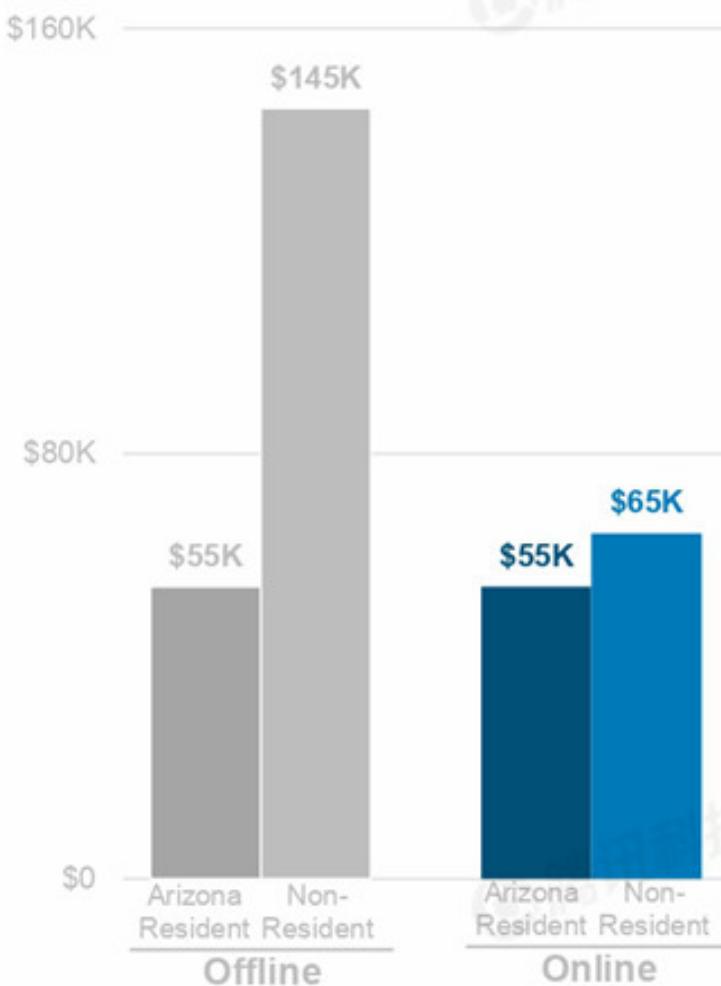
激发创新的关键是将大学文化的重心从教师转变为学生。

如果你把重点从以教师为中心转变为以学生为中心，你就会意识到你需要更多的工具来实现某些目标。

在亚利桑那州立大学，我们需要主动学习工具、适应性学习工具(建议工具、基于人工智能的模拟工具和游戏工具)以及我们现有的教职员和顾问。

当你开始思考让每个学生都能取得成功时，创新是绝对必要的。

本科学位学费(4年)



Source: Arizona State University (5/19). Wiley Online Library Interview (6/16)

移民： 对美国的科技领先地位至关重要

美国：60%最具价值的科技公司是由第一代或第二代美国人创立的 这些公司2018年雇佣的员工总数为190万人

美国价值最高的25家大型上市科技公司的移民创始人/联合创始人 按公司市值排序

Rank	Company	Mkt Cap (\$B)	LTM Rev (\$B)	Employees (K)	Founder / Co-Founder (1st or 2nd Gen Immigrant)	Generation
1	Microsoft	\$1,007B	\$122B	131K	--	--
2	Amazon	888	242	648	Jeff Bezos	2nd, Cuba
3	Apple	875	258	132	Steve Jobs	2nd, Syria
4	Alphabet / Google	741	142	99	Sergey Brin	1st, Russia
5	Facebook	495	59	36	Eduardo Saverin	1st, Brazil
6	Cisco	239	51	74	--	--
7	Intel	206	71	107	--*	--
8	Oracle	182	40	137	Larry Ellison / Bob Miner	2nd, Russia / 2nd, Iran
9	Netflix	158	17	7	--	--
10	Adobe	136	10	21	--	--
11	PayPal	134	16	22	Max Levchin / Luke Nosek / Peter Thiel / Elon Musk***	1st, Ukraine / 1st, Poland / 1st, Germany / 1st, South Africa
12	Salesforce	125	14	35	--	--
13	IBM	118	79	351	Herman Hollerith	2nd, Germany
14	Texas Instruments	104	16	30	Cecil Green / J. Erik Jonsson	1st, UK / 2nd, Sweden
15	NVIDIA	89	11	13	Jensen Huang	1st, Taiwan
16	Qualcomm	84	21	35	Andrew Viterbi	1st, Italy
17	Booking.com	77	14	25	--	--
18	Uber	75	12	22	Garrett Camp	1st, Canada
19	Automatic Data Processing	73	14	57	Henry Taub	2nd, Poland
20	VMware	69	9	23	Edouard Bugnion	1st, Switzerland
21	Intuit	67	7	9	--	--
22	ServiceNow	51	3	8	--	--
23	Workday	48	3	11	Aneel Bhusri	2nd, India
24	Micron	38	30	36	--	--
25	Cognizant	36	16	282	Francisco D'Souza / Kumar Mahadeva	1st, India** / 1st, Sri Lanka

Source: CapIQ as of 6/7/19. *While Andy Grove (from Hungary) is not a co-founder of Intel, he joined as COO on the day it was incorporated. **A person of Indian origin born in Kenya. ***Max Levchin / Luke Nosek / Peter Thiel's startup Confinity merged with Elon Musk's startup X.com to form PayPal in 3/00.

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美国：第一代移民创立了许多高价值的私营技术公司

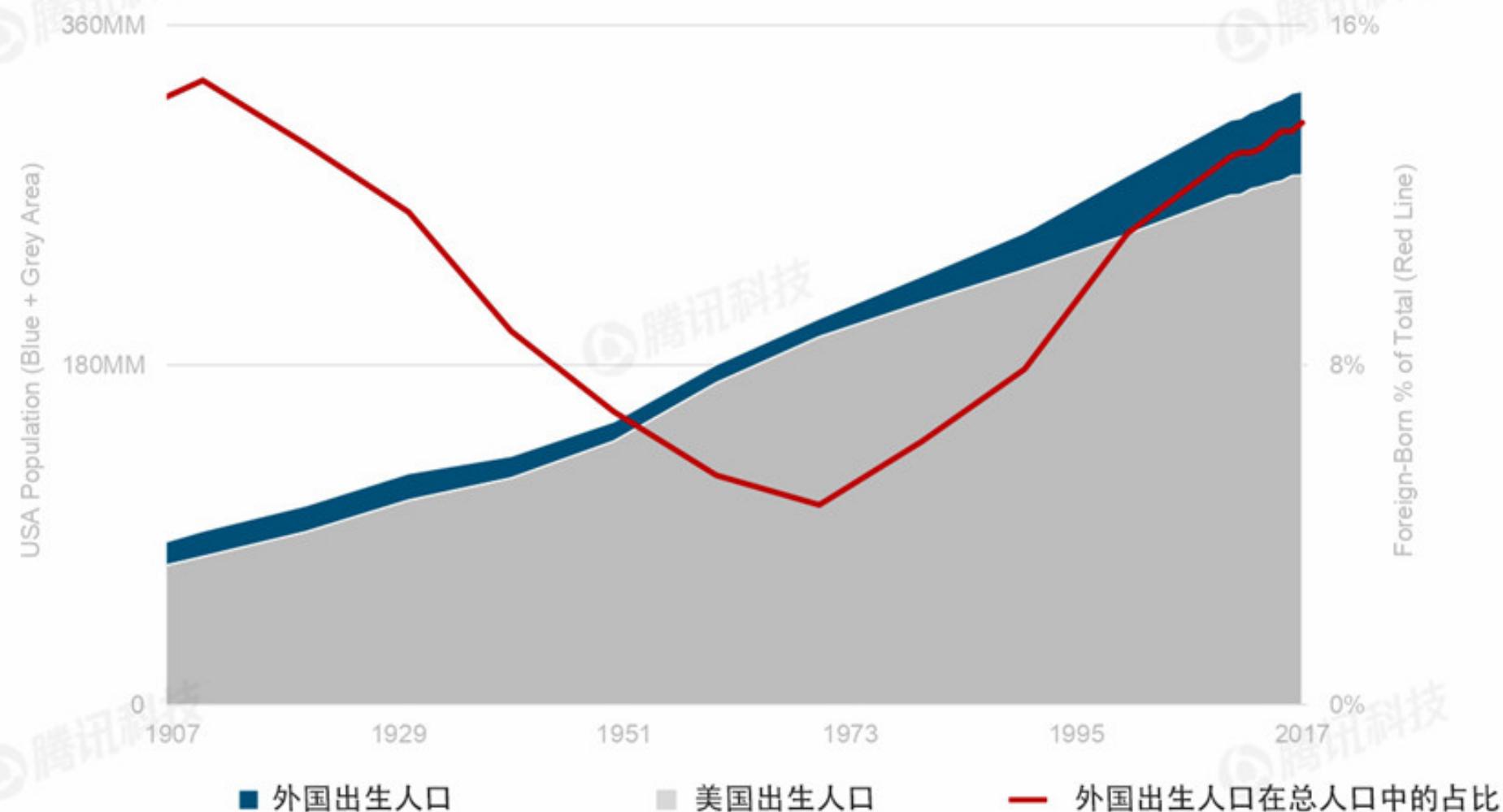
Company	Founder / Co-Founder	Country of Origin	Valuation (\$B)
WeWork	Adam Neumann	Israel	\$47B
SpaceX	Elon Musk	South Africa	31
Stripe	John Collison Patrick Collison	Ireland	23
Palantir	Peter Thiel	Germany	21
Epic Games	Mark Rein	Canada	15
DoorDash	Tony Xu	China	13
Wish	Peter Szulczecki Danny Zhang	Canada	9
Instacart	Apoorva Mehta	India	8
	Stewart Butterfield	Canada	
Slack	Serguei Mourachov	Russia	7
	Cal Henderson	UK	
UiPath*	Daniel Dines Marius Tirca	Romania	7
Tanium	David Hindawi	Iraq	7
	David Helgason	Iceland	
Unity Technologies	Nicholas Francis	Denmark	6
	Joachim Ante	Germany	
Robinhood	Bajju Bhatt	India	6
	Vlad Tenev	Bulgaria	
Compass	Ori Allon	Israel	4
Credit Karma	Kenneth Lin	China	4
Houzz	Adi Tatarko	Israel	4
	Alon Cohen		
	Marcin Zukowski	Netherlands	
Snowflake	Benoit Dageville	France	4
	Thierry Cruanes	France	
	Bipul Sinha	India	
Rubrik	Arvind Nithrakashyap	India	3
	Arvind Jain	India	
	Soham Mazumdar	India	
Zox	Tim Kentley-Klay	Australia	3
Oscar Health	Mario Schlosser	Germany	3

Company	Founder / Co-Founder	Country of Origin	Valuation (\$B)
CrowdStrike	Dmitri Alperovitch	Russia	\$3B
Affirm	Max Levchin	Ukraine	3
	Ali Ghodsi	Sweden	
Databricks	Matei Zaharia	Romania	3
	Ion Stoica	Romania	
Nuro	Jiajun Zhu	China	3
	Dave Ferguson	New Zealand	
	Ankur Kothari	India	
Automation Anywhere	Mihir Shukla	India	3
	Neeti Metha Shukla	India	
	Rushabh Parm	India	
Confluent	Jun Rao	China	3
	Neha Narkhede	India	
Roblox	David Baszucki	Canada	2
Medallia	Borge Hald	Norway	2
Lime	Toby Sun	China	2
	Brad Bao		
Zume Pizza	Alex Garden	Canada	2
Gusto	Tomer London	Israel	2
Lemonade	Shai Wininger	Israel	2
	Daniel Schreiber		
LegalZoom	Brian Lee	South Korea	2
	Al Goldstein	Uzbekistan	
Avant	John Sun	China	2
	Paul Zhang	China	
Apttus	Krik Krappe	UK	2
Postmates	Bastian Lehmann	Germany	2
Sprinklr	Ragy Thomas	India	2
Cloudflare	Michelle Zatlyn	Canada	2
Carta	Manu Kumar	India	2
ZocDoc	Oliver Kharraz	Germany	2
Warby Parker	Dave Gilboa	Sweden	2
Carbon3D	Alex Ermoshkin	Russia	2
Pony.ai	James Peng	China	2
	Tiancheng Lo		
ServiceTitan	Ara Mahdessian	Iran	2
	Vahe Kuzoyan	Armenia	
Segment	Ilya Volodarsky	Russia	2
Quanergy	Tianyue Yu	China	2

Source for Valuation & Founders Backgrounds: Based on analysis by Pitchbook, Wall Street Journal, CB Insights, Forbes, the National Foundation for American Policy. *UiPath is headquartered in New York, NY but was originally founded in Romania.

美国：外国出生和长大的人口占到了14%， 接近1910年触及的15%历史最高点

美国人口与外国出生人口在总人口中的占比



Source: Migration Policy Institute (MPI) tabulation of data from U.S. Census Bureau, 2010-2017 American Community Surveys (ACS) & 1970, 1990 & 2000 Decennial Census. An other note: Emily Lennon, "Historical Census Statistics on the Foreign-Born Population of the United States: 1850 to 1990" (Working Paper no. 29., U.S. Census Bureau, Washington, DC, 1999). Note: The term "immigrants" (also known as the foreign born) refers to people residing in the United States who were not U.S. citizens at birth. This population includes naturalized citizens, lawful permanent residents (LPRs), certain legal nonimmigrants (e.g., persons on student or work visas), those admitted under refugee or asylee status & persons illegally residing in the United States. Population growth figures from St. Louis FRED database.

美国公司：
你们的税金到哪儿去了？

美国损益表：30年平均净利润率为-18%

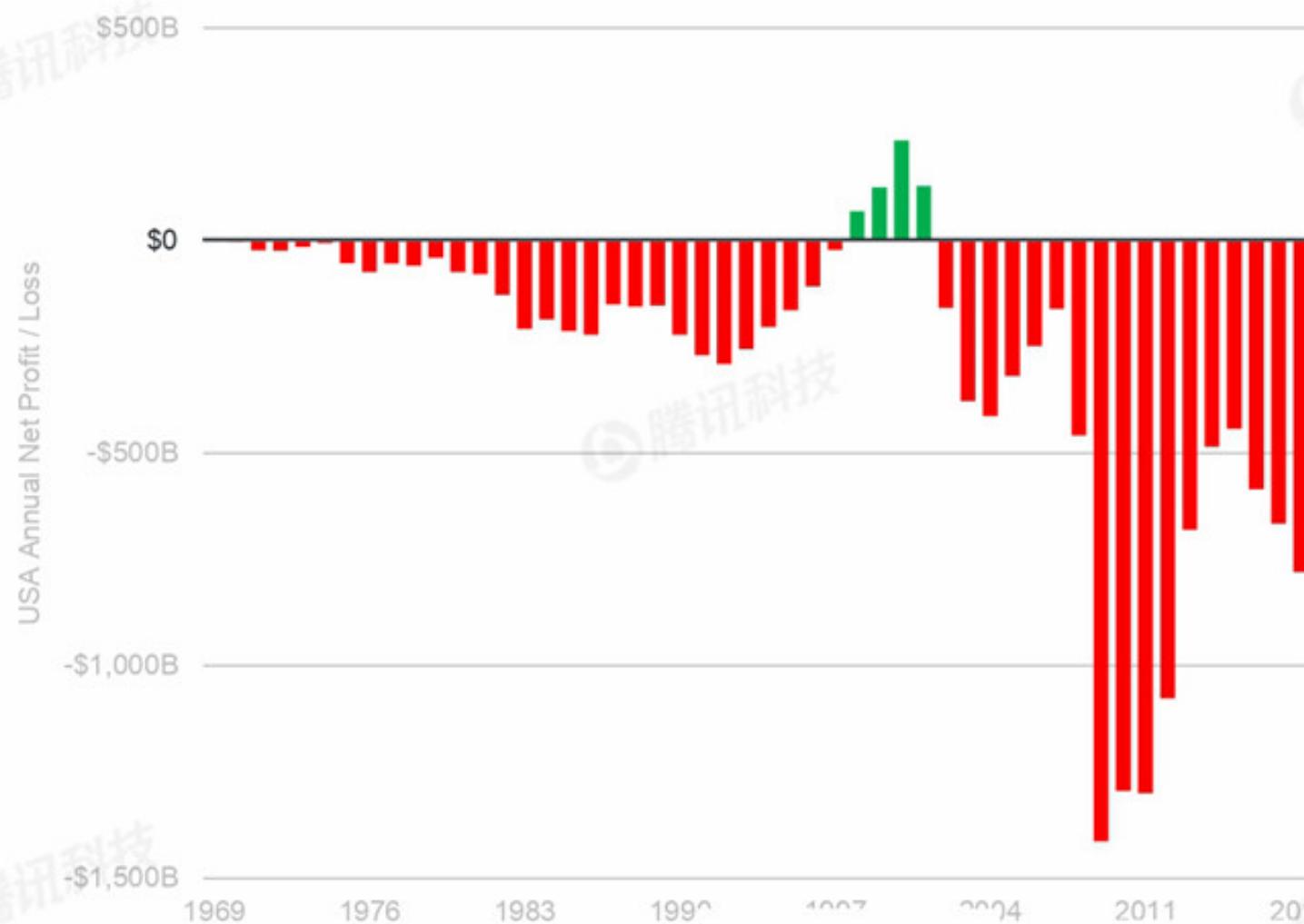
美国损益表

	F1988	F1993	F1998	F2003	F2008	F2013	F2018	Comments
Revenue (\$B)	\$909	\$1,154	\$1,722	\$1,782	\$2,524	\$2,775	\$3,330	
Y/Y Growth	6%	6%	9%	(4%)	(2%)	13%	0%	+5% Y/Y average, 1988-2018
Individual Income Taxes*	\$401	\$510	\$829	\$794	\$1,146	\$1,316	\$1,684	Largest driver of revenue
% of Revenue	44%	44%	48%	45%	45%	47%	51%	
Social Insurance Taxes	\$334	\$428	\$572	\$713	\$900	\$948	\$1,171	Social Security & Medicare payroll tax
% of Revenue	37%	37%	33%	40%	36%	34%	35%	
Corporate Income Taxes*	\$95	\$118	\$189	\$132	\$304	\$274	\$205	Fluctuates with economic conditions
% of Revenue	10%	10%	11%	7%	12%	10%	6%	
Other	\$79	\$99	\$133	\$144	\$174	\$237	\$271	Estate & gift taxes, duties / fees...
% of Revenue	9%	9%	8%	8%	7%	9%	8%	
Expense (\$B)	\$1,064	\$1,409	\$1,652	\$2,160	\$2,983	\$3,455	\$4,109	
Y/Y Growth	6%	2%	3%	7%	9%	(2%)	3%	
Entitlement / Mandatory	\$448	\$671	\$859	\$1,182	\$1,595	\$2,032	\$2,522	Risen owing to rising healthcare costs + aging population
% of Expense	42%	48%	52%	55%	53%	59%	61%	
Non-Defense Discretionary	\$174	\$247	\$282	\$419	\$522	\$577	\$639	Education / law enforcement / transportation / general government...
% of Expense	16%	18%	17%	19%	18%	17%	16%	
Defense	\$291	\$292	\$270	\$405	\$612	\$626	\$623	2008 increase driven by War on Terror
% of Expense	27%	21%	16%	19%	21%	18%	15%	
Net Interest on Public Debt	\$152	\$199	\$241	\$153	\$253	\$221	\$325	Recent benefit of historic low interest rates
% of Expense	14%	14%	15%	7%	8%	6%	8%	
Surplus / Deficit (\$B)	(\$155)	(\$255)	\$69	(\$378)	(\$459)	(\$680)	(\$779)	-18% average net margin, 1988-2018
Net Margin (%)	(17%)	(22%)	4%	(21%)	(18%)	(24%)	(23%)	

Source: Congressional Budget Office, White House Office of Management & Budget. *Individual & corporate income taxes include capital gains taxes. Note: USA federal fiscal year ends in September. Non-defense discretionary includes federal spending on education, infrastructure, law enforcement, judiciary functions.

美国损益表：50年里有45年蒙受了净亏损

美国年度利润和亏损



Source: Congressional Budget Office, White House Office of Management & Budget. Note: USA federal fiscal year ends in September.

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美国福利政策支出：医疗保险+医疗补助推动大多数支出增长…

按类别划分的美国福利政策支出

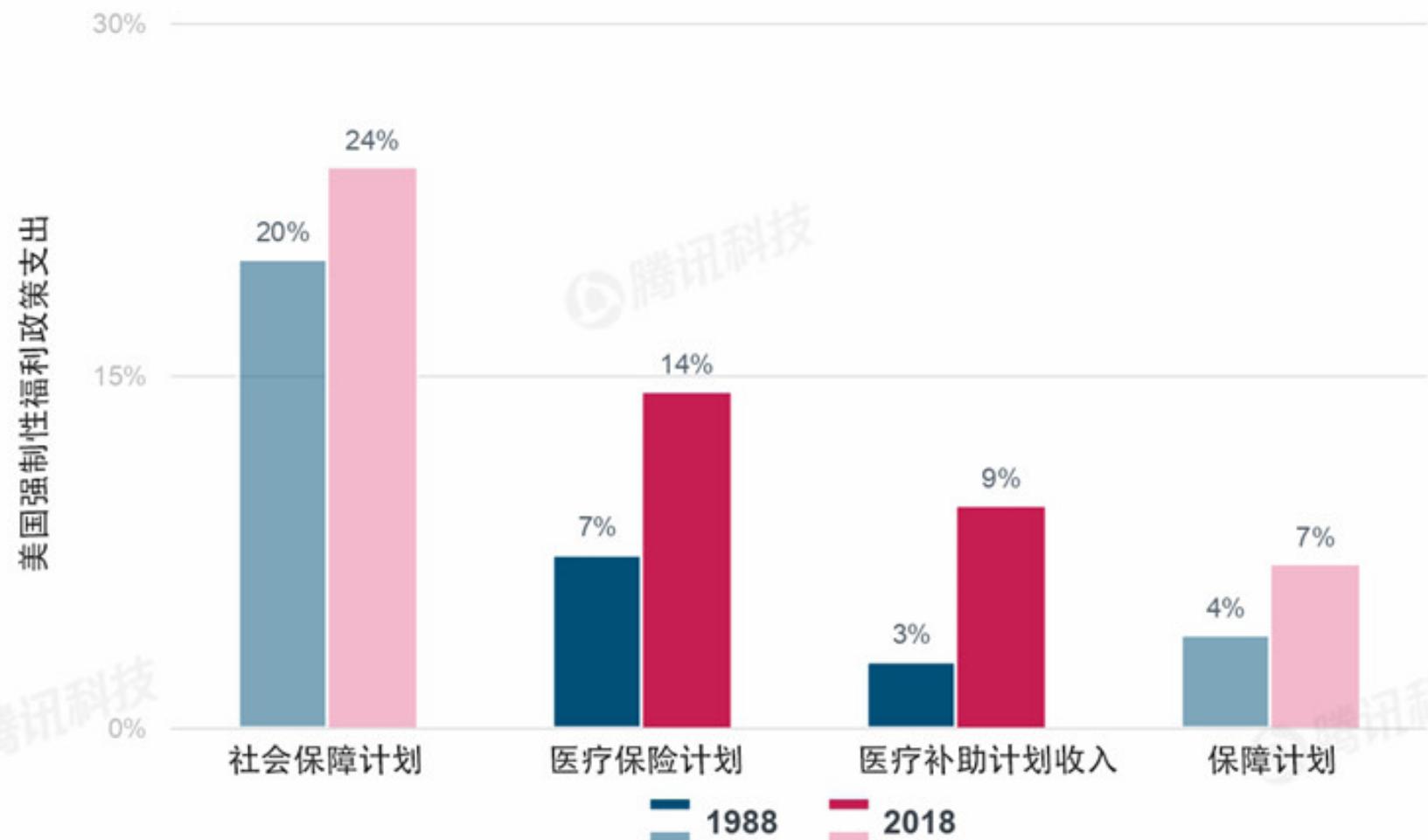
1988年福利政策支出：

3670亿美元/在总支出中所占比例为34%



2018年福利政策支出：

2.2万亿美元/在总支出中所占比例为54%

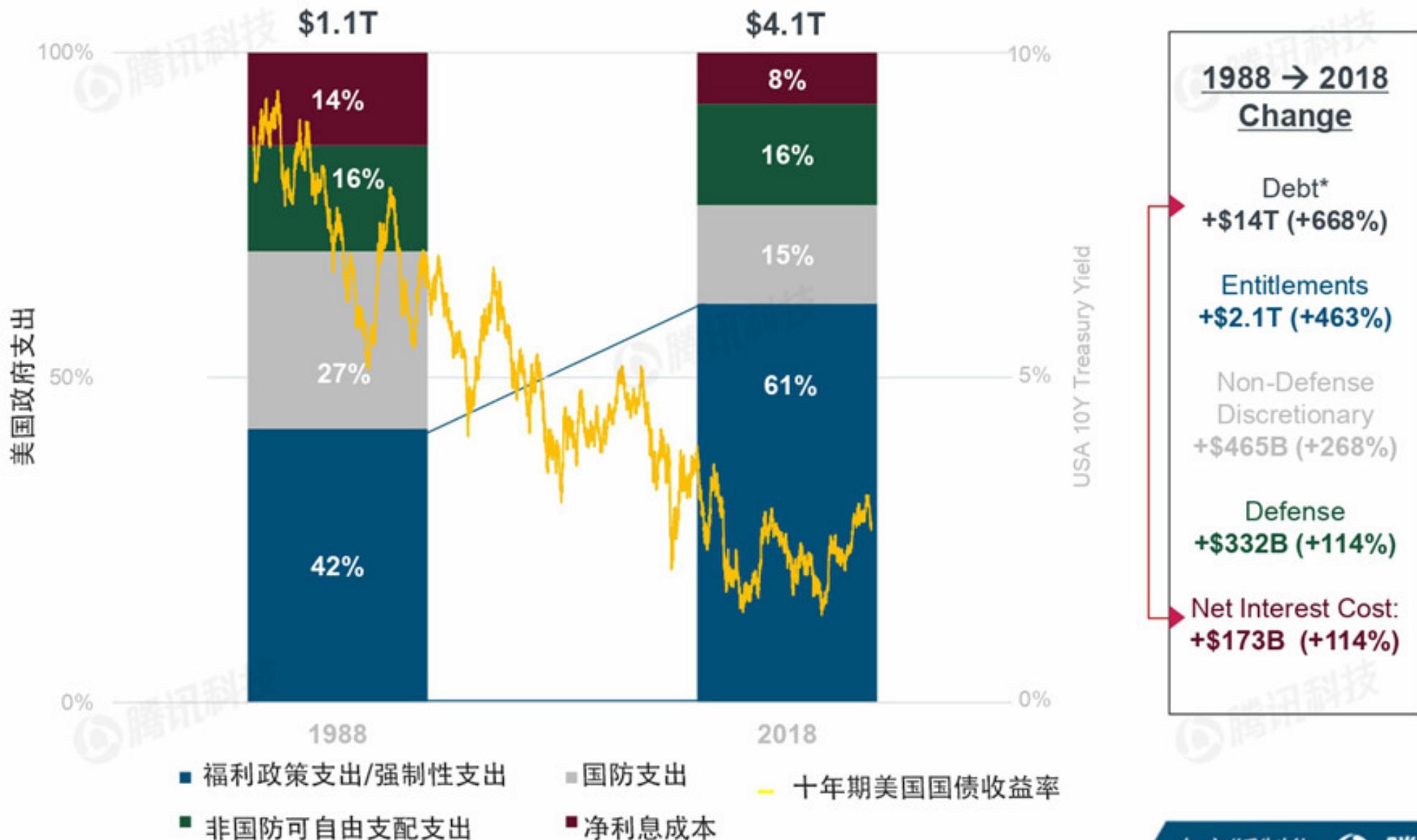


Source: Congressional Budget Office, White House Office of Management & Budget. *1988 Income Security programs defined as Food Stamps + SSI + Family Support + Child Nutrition + Earned Income Tax Credit + Other. 2018 Income Security defined as Earned Income Tax Credit + SNAP + SSI + Unemployment + Family Support + Child Nutrition. In 2018, there was an additional ~\$302B in mandatory spending, including Veterans' pensions & ~\$81B in 1988.

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美国福利政策支出： 在政府支出中所占比例为61%，而30年前所占比例为42%

按类别划分的美国政府支出



30年以来美国福利政策支出的增长：国内数据

2017年

美国家庭收入中值为6.1万美元

联邦政府向每个家庭支付的平均福利支出为1.7万美元
相当于家庭收入的28%

1987年

美国家庭收入中值为2.6万美元

联邦政府向每个家庭支付的平均福利支出为4000美元
相当于家庭收入的15%

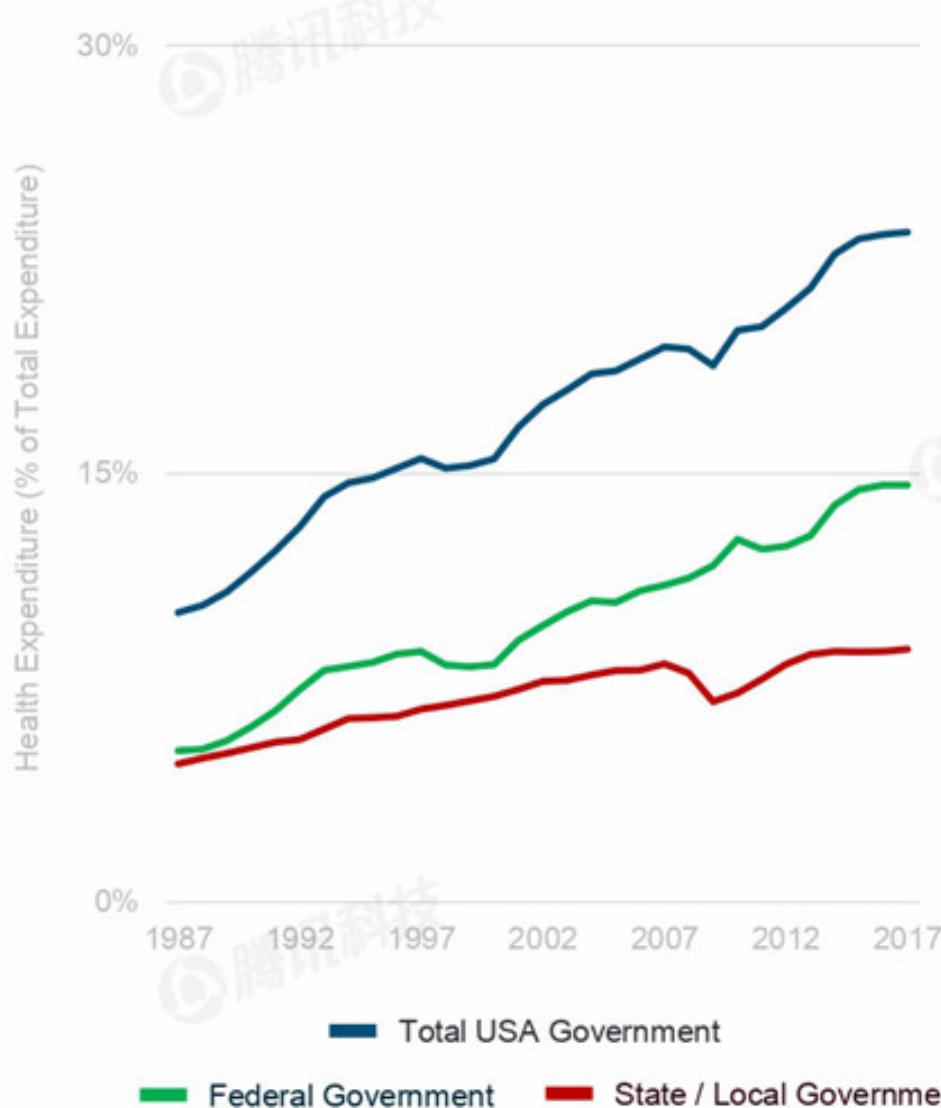
Source: Congressional Budget Office, White House Office of Management & Budget, US Census Bureau

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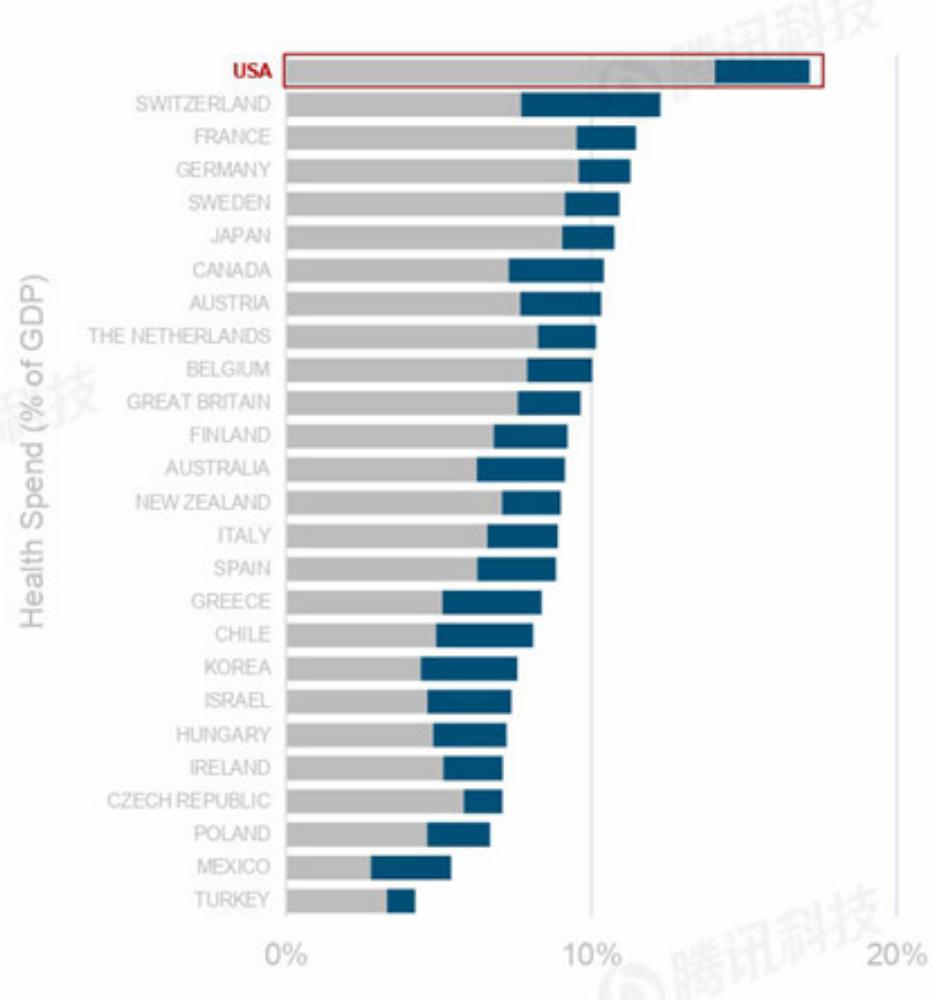
医疗保健(美国): 整个生态系统中的数字影响不断扩大

医疗成本=对于政府和消费者处于高水平并在逐年增长

美国医疗支出占比政府总支出

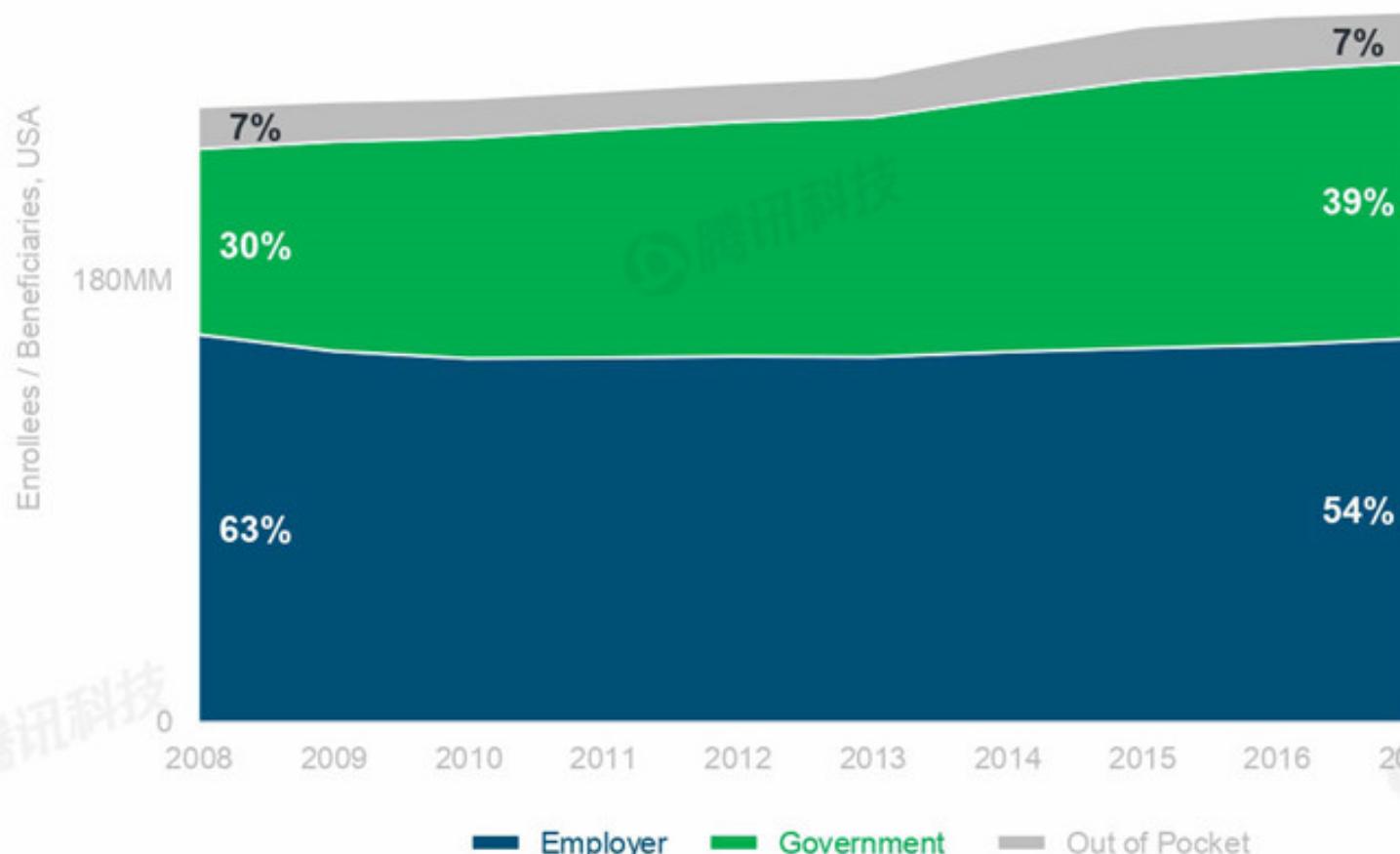


2017美国医疗占比总GDP



医疗保险覆盖率：越来越多的来自政府和雇主

美国投保人口数占比总人口



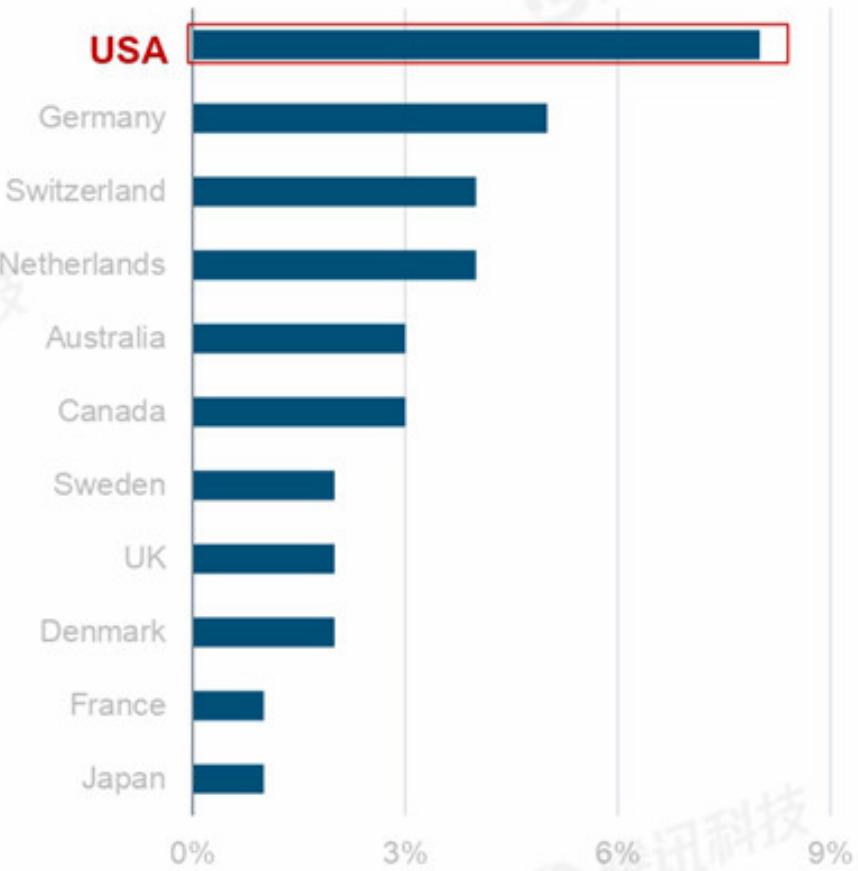
Source: Kaiser Family Foundation analysis of Census Bureau's American Community Survey (2008-2017). Note: Government includes those covered by Medicare, Medicaid, or Military / Veteran Coverage. Employer = those covered through a current or former employer or union. Out of Pocket = Those covered by a policy purchased directly from an insurance company, either as policyholder or as dependent.

医疗保险可预防的死亡人口数/医疗保险效率： 美国低于其他国家

每10万人医疗保险可预防的死亡人口数



2016行政医疗保险支出占比

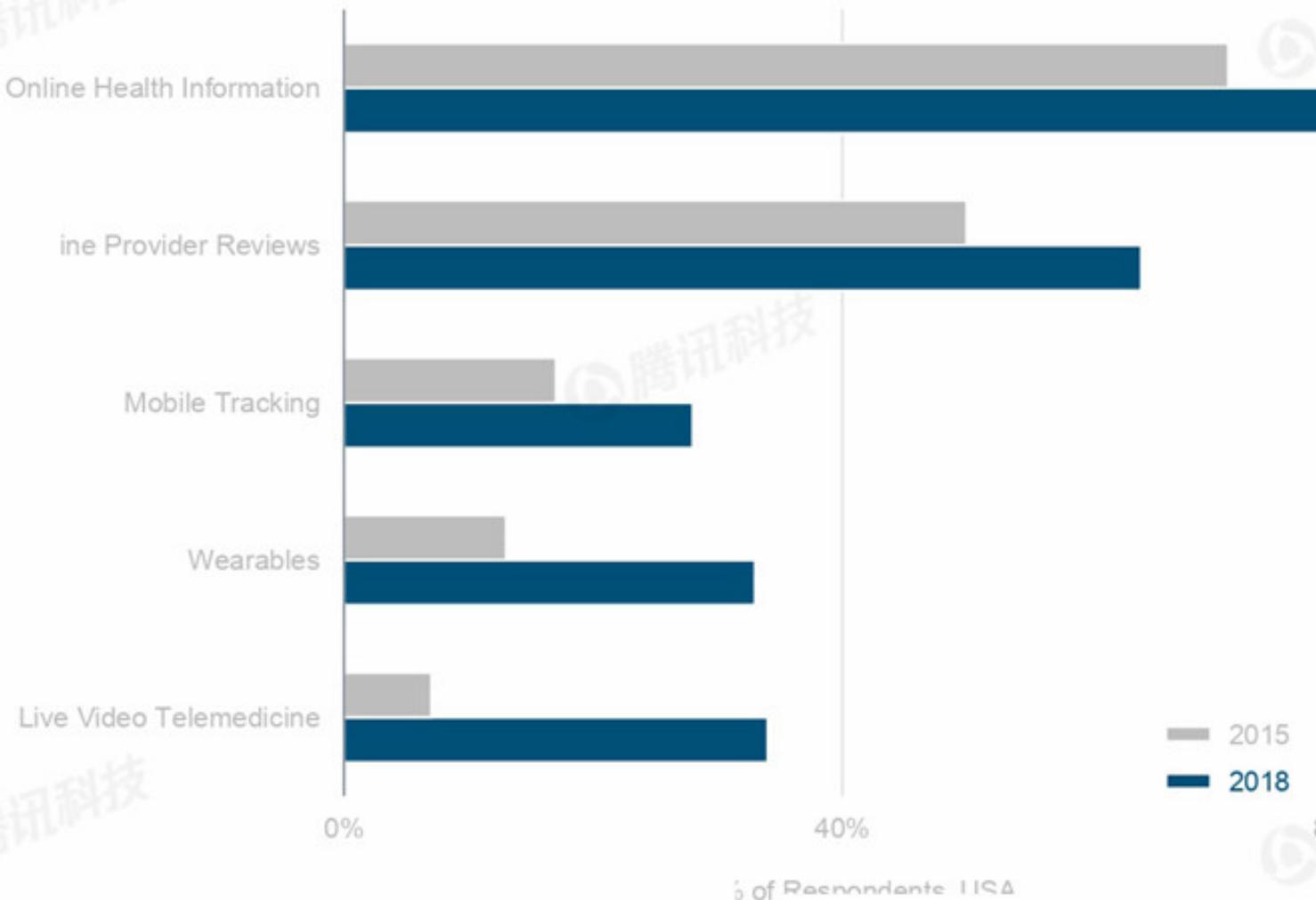


Source: Commonwealth Fund Analysis (2017). Preventable deaths defined as deaths due to illnesses that are considered non-fatal with timely form of treatment available. Admin spend defined as non-care giving roles, such as billings & collections.

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医保：由于消费者行为的变化，医疗保险越来越电子化

美国消费者使用各类电子产品人数分布



Source: Rock Health Digital Health Consumer Adoption Survey. 2018: n = 4,000, 2015: n = 4,017 Americans ages 18+

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美国医疗： 较高的电子化

数据库=更多研究结果

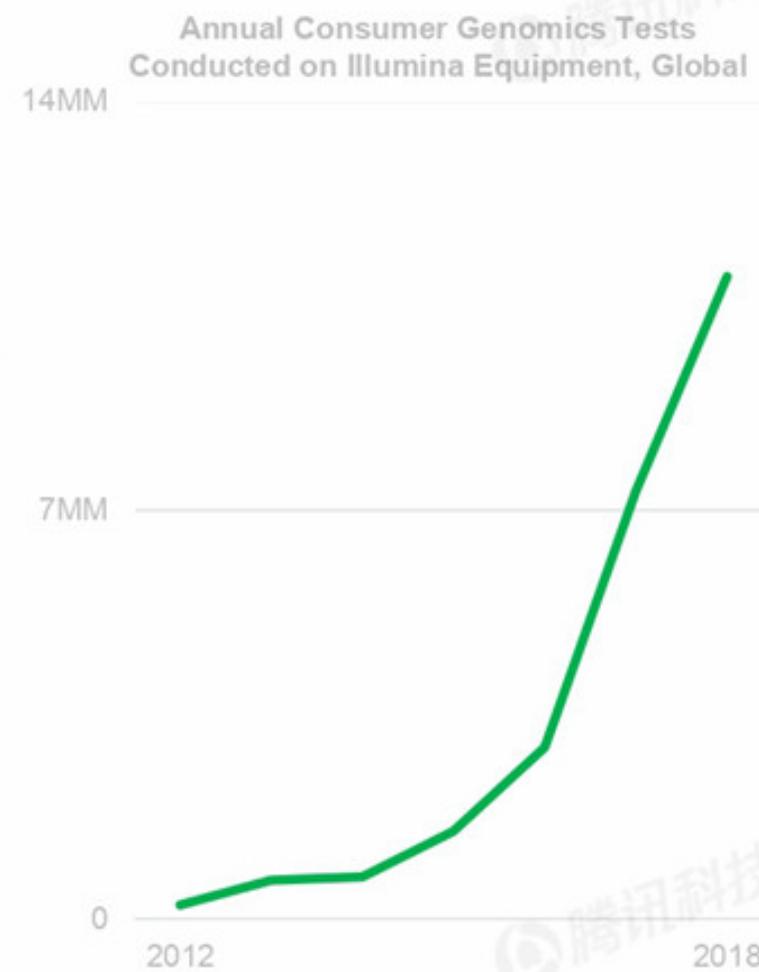
网络研究=更多数据获取渠道/决策工具

让病人参与到决策环节有利于提高患者满意度和改善健康结果

该研究基于1,945名参与者的数据分析了美国国家健康与老龄化趋势。

研究发现互联网使用与老年人的决策偏好相关。同样，与健康相关的互联网使用与老年人决策参与呈正相关。

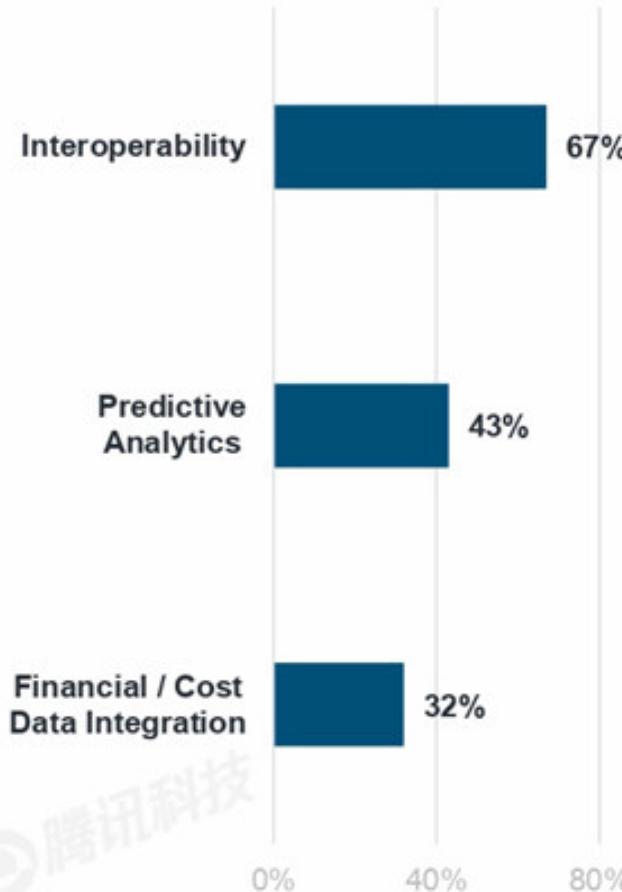
基因组测试=增加个人基因数据的基础



电子健康记录(EHR)=管理患者数据

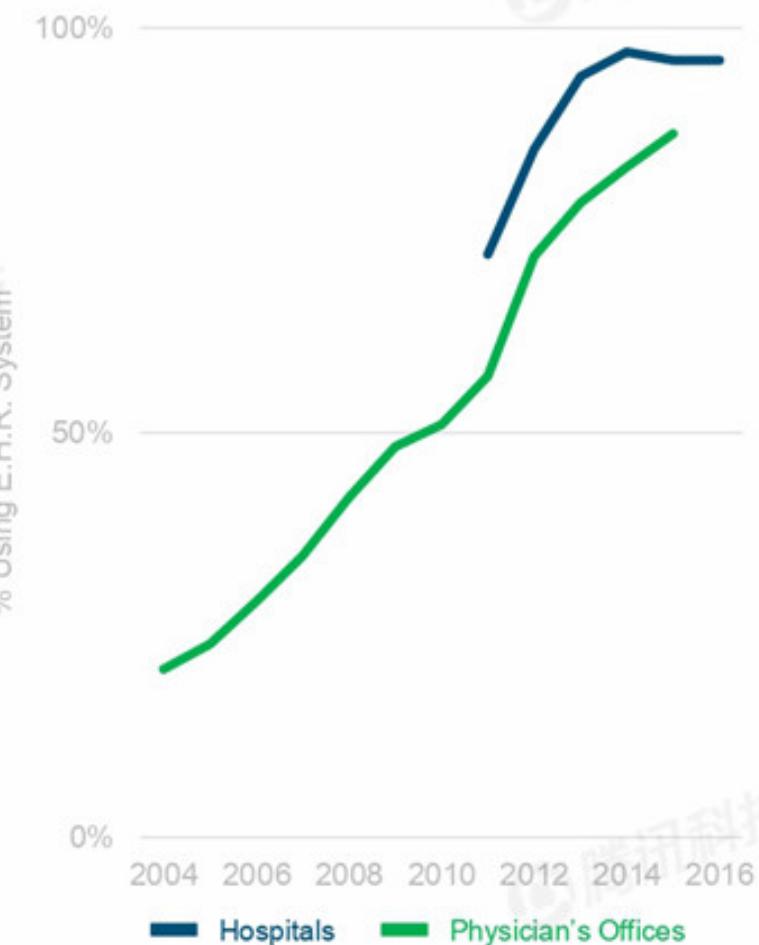
电子健康记录使用=还处于初期阶段

Top Physician 'Wants' for Future EHR Development, per Stanford / Harris Poll, 9/18



美国电子健康记录使用率=接近100%

EHR Adoption, USA



Source: Office for National Coordination of Health Information Technology. Stanford / Harris poll of 521 Primary Care physicians (Family Practice, General Practice, or Internal Medicine) recruited through the American Medical Association. All have been using EHR for at least 1 month.
Note: Adoption of EHR refers to any EHR system being used by Office-based physicians or hospitals, does not imply all records are kept electronically.

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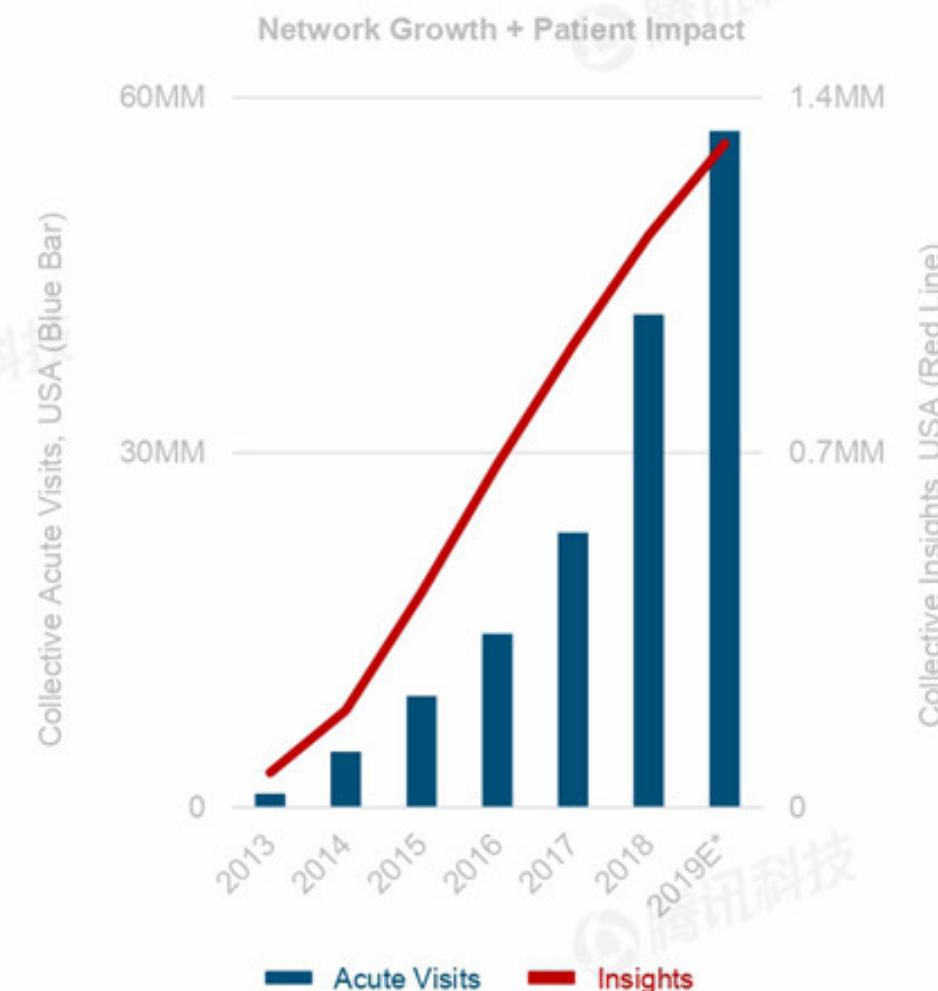
健康网络=协调整个医疗团队

协调医疗团队=提高效率，降低成本

我们正在努力让分散的医疗团队可以为一致的目标工作，并了解到其他每个人都在做什么。尽管在不同的组织里，大家还是围绕患者各尽其职。

你也可以就这个问题投入大量昂贵稀缺的资源，但是这个是不可持续的，或者你可以充分利用科学技术。我不是在说组织间的通知，而是一种真正的深入的合作。

集体医疗：实时协作健康网络



Source: Collective Medical Technologies Inc. (6/19). *2019E represents annualized data as of 6/19. Note: Acute Visits = Unique provider-provider interactions (ED visit, IP stay). Insights = Unique provider-provider actions taken to optimize patient care.

线上搜索=提升医疗服务的获取度以及可用度

优化易腐库存=加速医疗进程

Zocdoc让医院可以充分利用闲置的

20%-30%医疗资源，

极大的提升了患者的医疗获取度。

一般情况下患者要等待24天才能看上病，

但是利用Zocdoc进行线上预约，

平均24-72内就可以看上病。

由于这种双赢的运作模式，

我们成功的在纽约建立起了一种

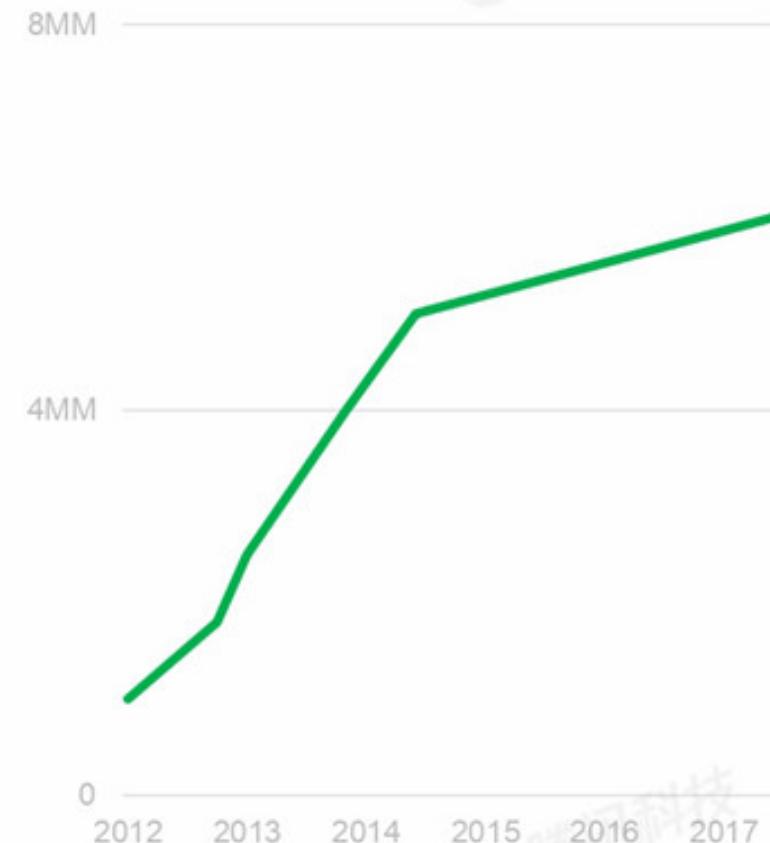
新形势的医院病人关系，

其他的市场也取得了同样的成功。

——Zocdoc首席执行官Oliver Kharraz M.D.

Zocdoc=电子化医疗市场

Zocdoc Monthly Patients, USA



Source: Zocdoc (6/17, 6/19)

按需紧急医疗服务=有效减少了接受治疗的时间

Solv=快捷医疗市场



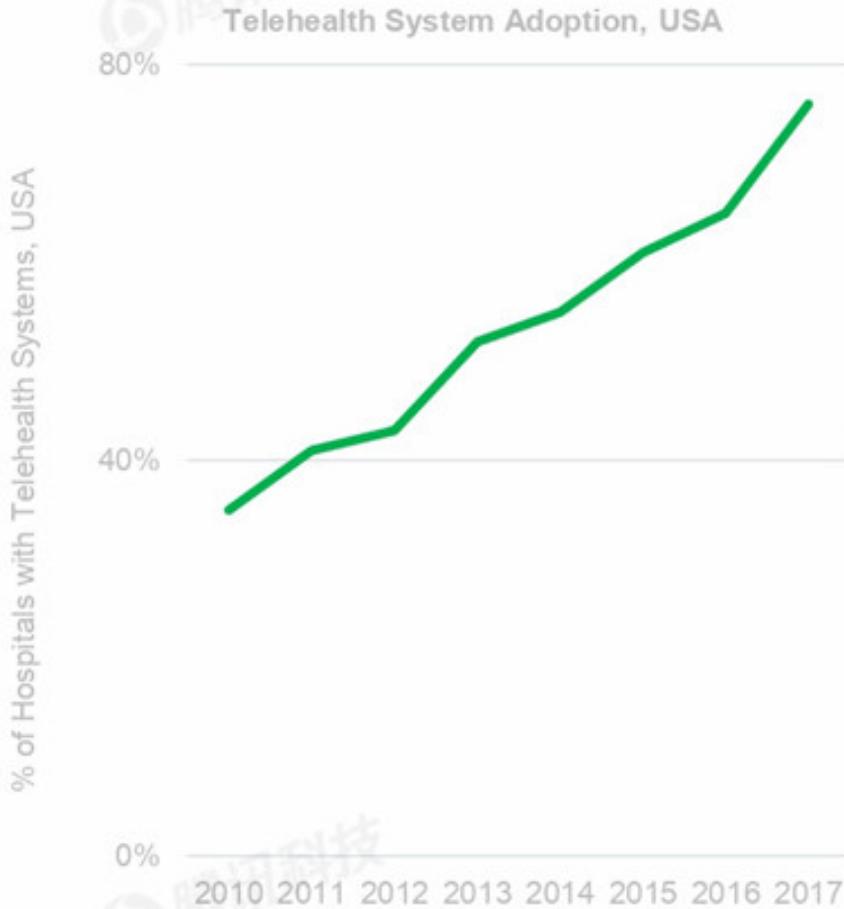
患者不再需要等待24天才能看到医生，
Solv可以让病人在15分钟之内看上病。

然而在20年前，
患者通常要花上至少两个小时从预约到解决问题。

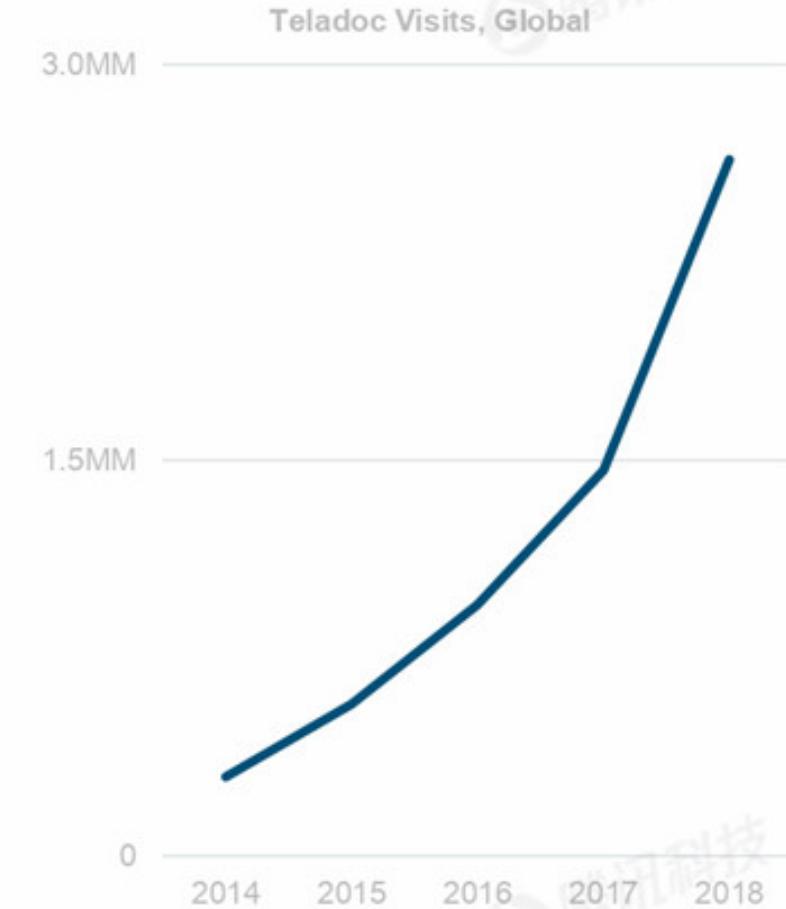
Heather Fernandez – CEO / Co-Founder, Solv, 6/19

远程保健/远程医疗=加强医患关系

远程医疗保健系统=加强医院实施



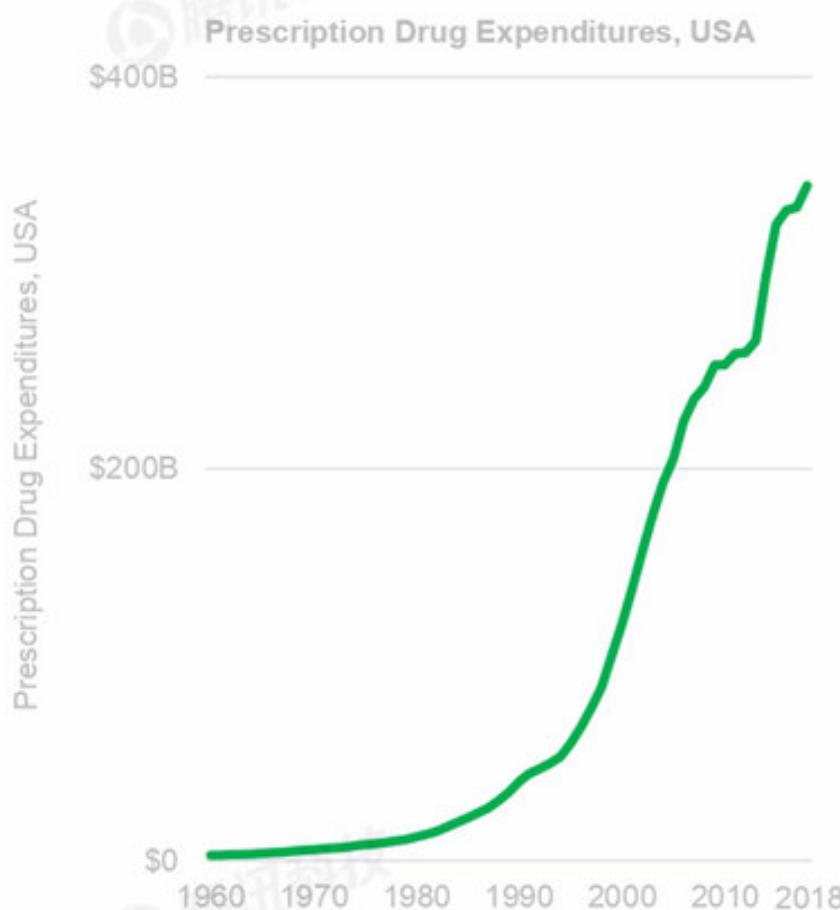
Teladoc=远程医疗



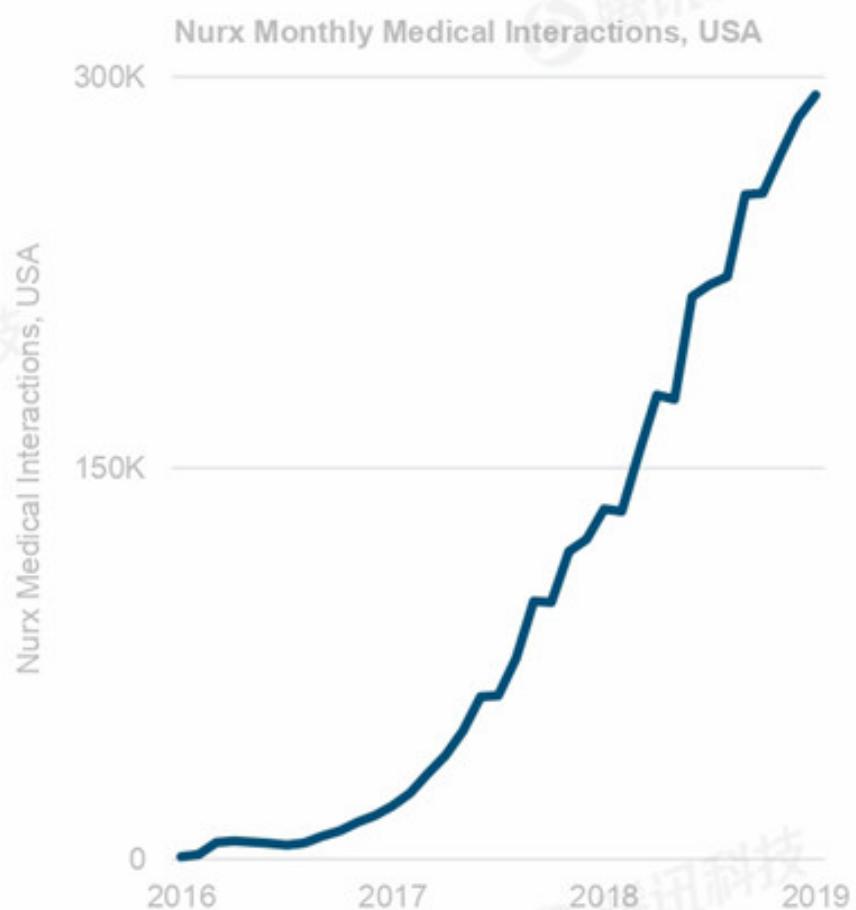
Source: American Hospital Association Fact Sheet: Telehealth (2/19), Teladoc SEC Filings.

处方递送=提高便利性+可负担性

处方药支出 (美国) 快速增长



Nurx每月医疗互动：按需药物递送



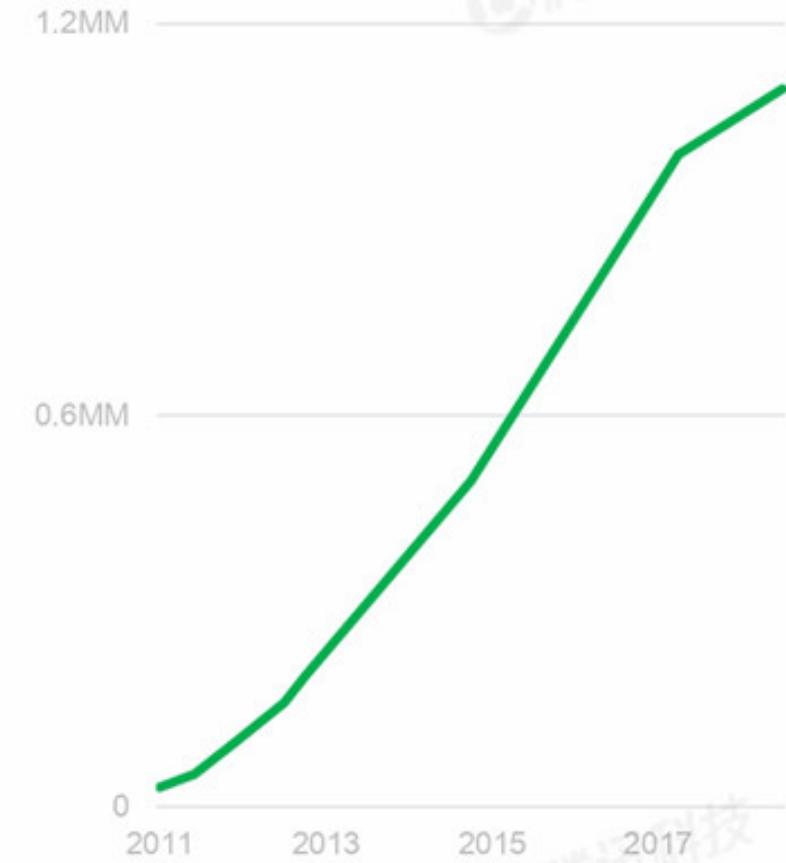
Source: Centers for Medicare & Medicaid Services (CMS) National Health Expenditures (5/19), Nurx (5/19). Note: Medical Interactions = medical questions & ongoing fulfillment

通信/专业社区：将知识库扩展到从业人员

通信：提高处理独特案例的能力

大多数人没有意识到，对医生来说，将病人推荐给合适的专家并不总是容易的。我们的网络使这一过程变得无缝，即使在最困难的情况下也是如此。

Doximity：医师社交网络



Source: Doximity (5/19), Thrive Global (12/17). Members include physicians, physician assistants, nurse practitioners & other healthcare professionals.

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健康保险管理=简化+集中用户体验

现代化管理：重塑传统系统

我们有我们自己的索赔系统和临床管理系统，我们建立起自己的网络，我们在内部为管理人们的医疗保健所做的一切都是从技术角度重新发明和重建的，所以我们可以更快地实现目标。我们可以雇佣更多的工程师、数据科学家、产品设计师以及更多能以不同方式思考医疗保健问题的聪明临床医生。

Oscar : 数字健康管理

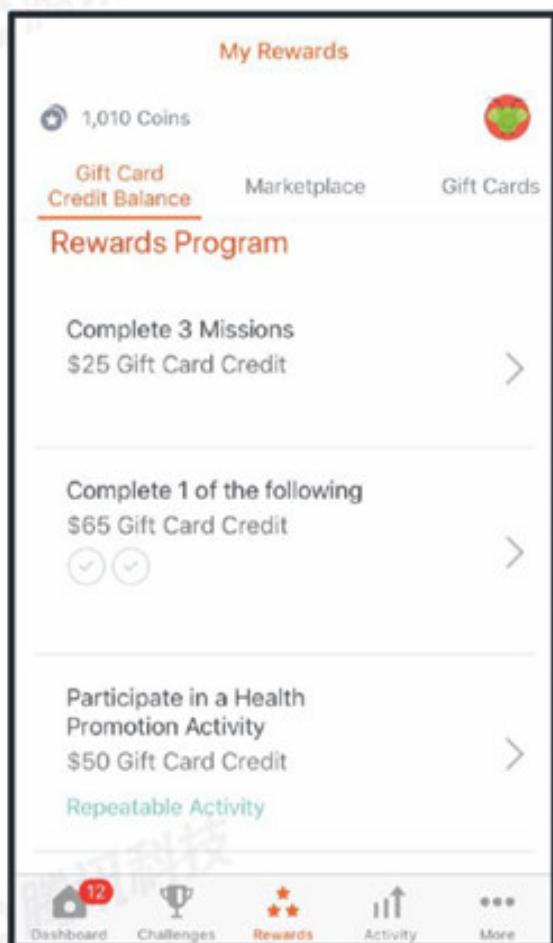


Source: Oscar Health, Mario Schlosser Interview with Wired (8/18). Note: Oscar data as of the first month of each year based on enrollment in individual plans.

中文版制作: 腾讯科技

健康激励工具：通过储蓄推动积极选择+个性化奖励

奖励：建立+强化积极习惯



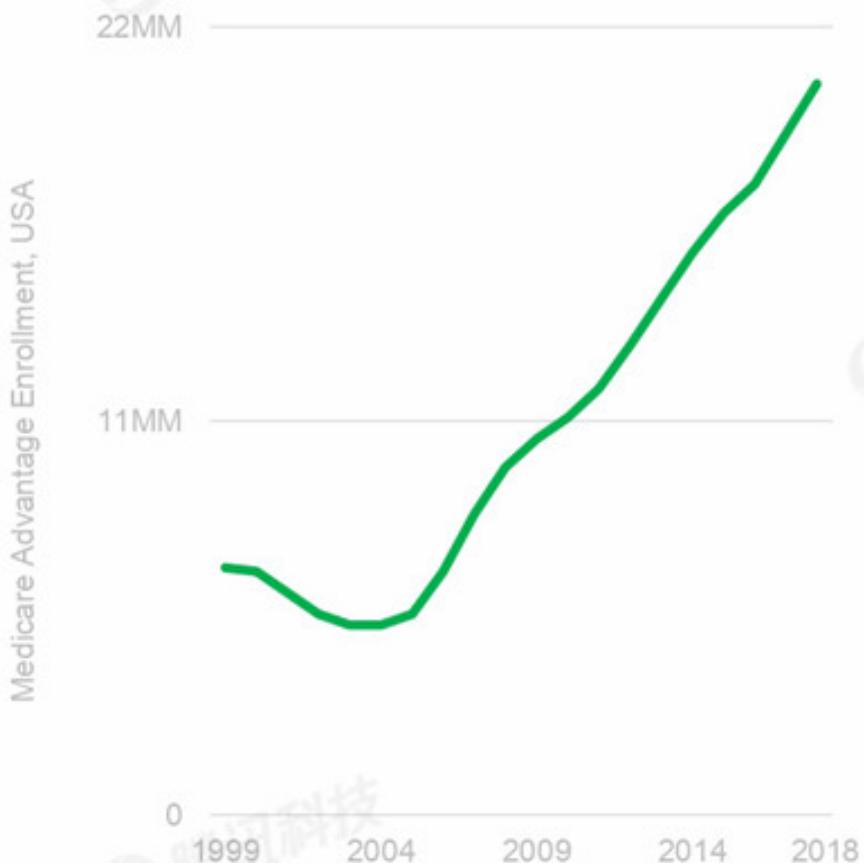
促进健康：激励健康生活



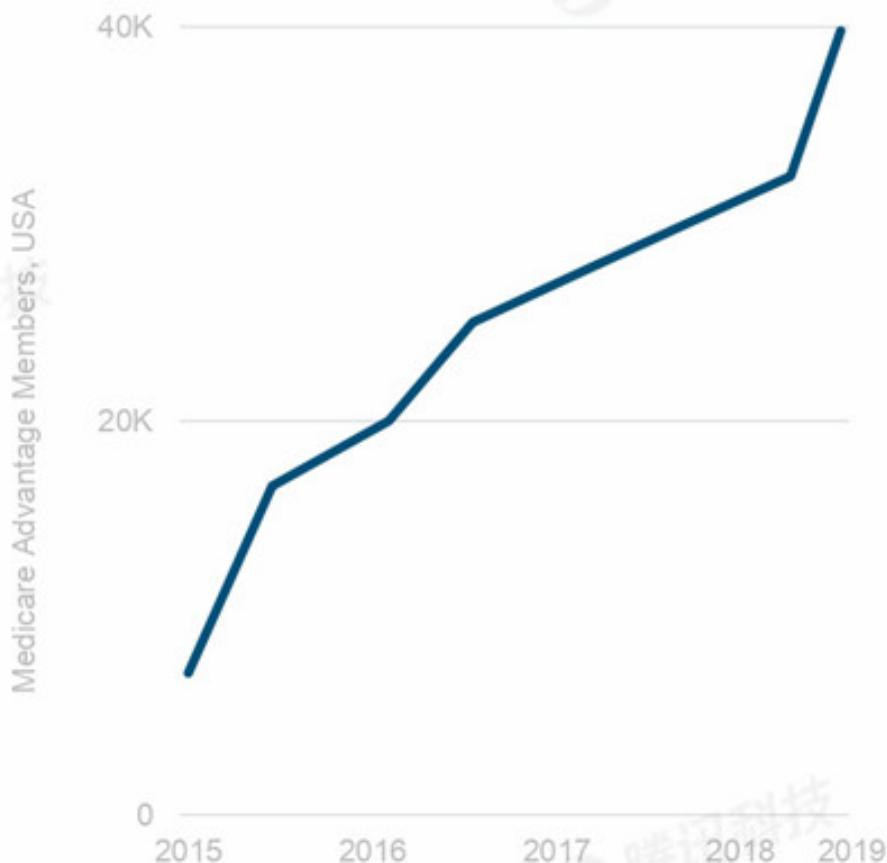
Source: Rally Health / UnitedHealth Group (6/19)

医疗计划管理=个性化覆盖+成本

联邦医疗保险优待就医人数呈上升趋势



Clover健康将计划与成员需要相匹配



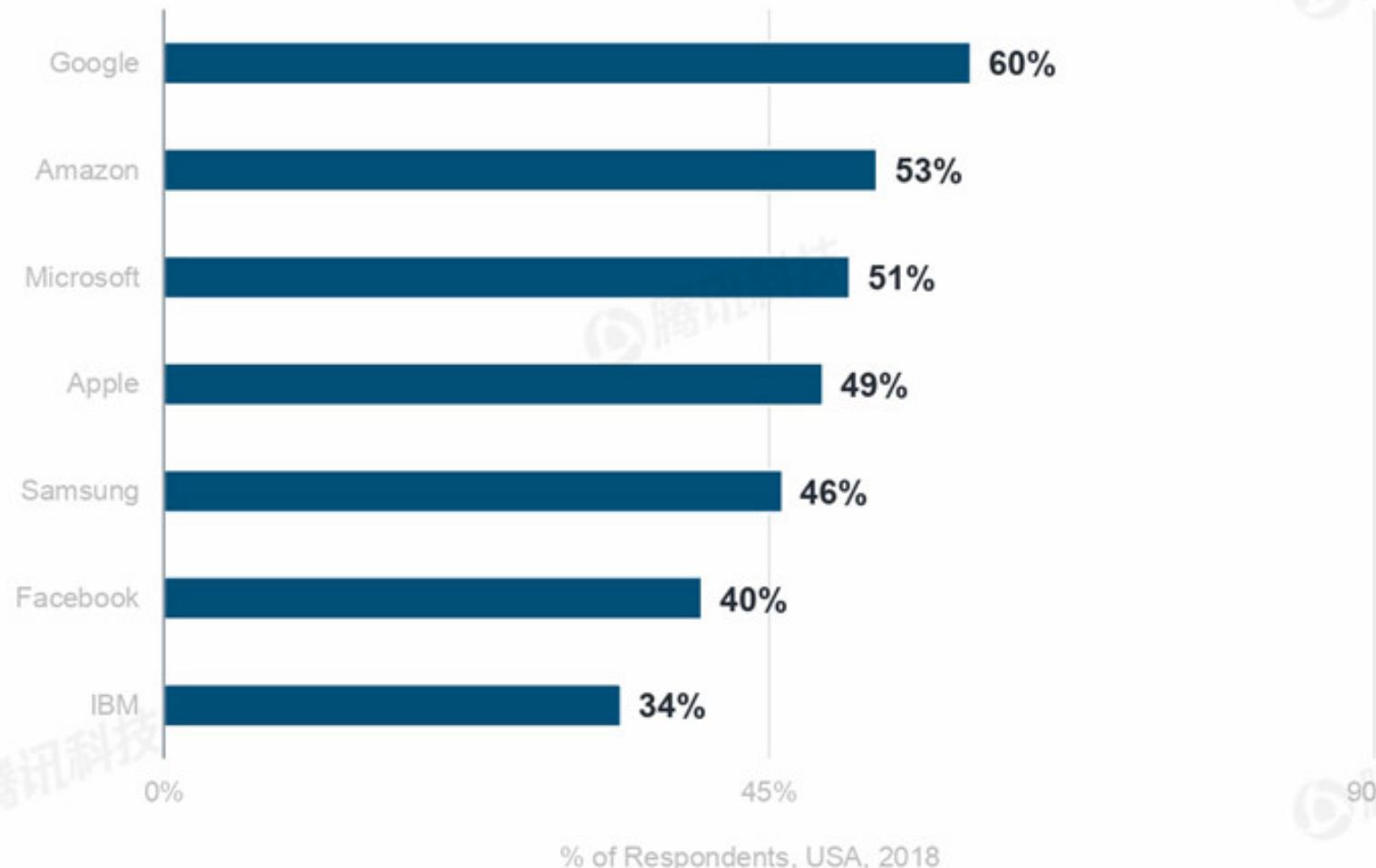
Source: Kaiser Family Foundation analysis of CMS Medicare Advantage enrollment files (2008-2018) & MPR numbers (1999-2018). Data are for the respective year, with the exception of 2006, which is from April (11/18). Clover Health (3/19). Note: Enrollment includes cost plans & Medicare Advantage Plans. Approximately 61MM people are enrolled in Medicare in 2018.

中文版制作: 腾讯科技

医疗保健创新：互联网领导者建设能力

医疗保健创新：互联网领导者准备捕获数据

互联网领导者：越来越信任医疗保健数据



Source: Rock Health Digital Health Consumer Adoption Survey, 2018: n = 4,000. *Note this question was only asked to the 1,000 USA respondents that answered 'yes' to the question asking whether they'd be willing to share their health data with a tech company.

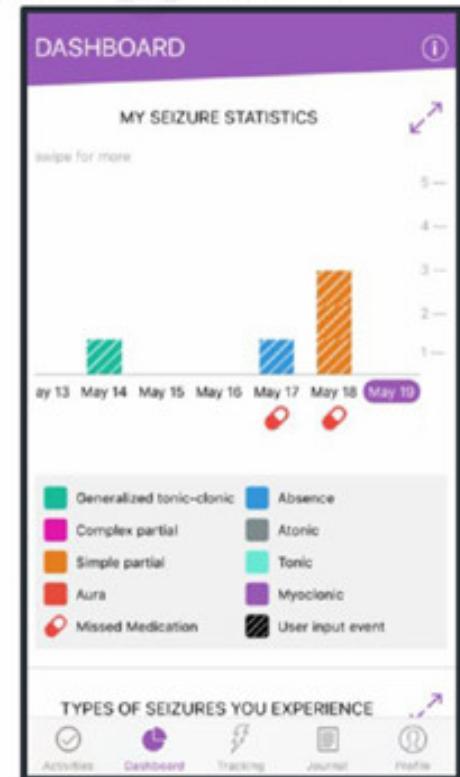
医疗保健创新=苹果... 硬件+应用商店利用面向消费者的研究

Apple = Democratization of Healthcare
苹果==医疗保健民主化

苹果首席执行官蒂姆·库克曾说过：
“如果你放眼未来，回顾过去，你会问这样一个问题：‘苹果对人类最大的贡献是什么？’这将是关于健康的。因为我们的业务始终都是丰富人们的生活。我们更多地通过苹果手表、RESEARCHKIT&CAREKIT创建的其他功能(包括IPHONE上的医疗记录)进入医疗保健领域。
这可是件大事，医疗对人们来说是非常重要的。我们正在使它民主化。我们正在采取措施赋予个人管理其健康的权力。”

Tim Cook – CEO, Apple, 1/19

Apple ResearchKit = Medical Research Technology for Consumers
APPLE RESEARCHKIT = 面向消费者的医学研究技术



Source: Apple. Tim Cook Interview with CNBC (1/19). Morgan Stanley estimates that 70MM Apple Watch units have been sold from 2015-2019.

中文版制作: 腾讯科技

医疗保健创新=谷歌/ALPHABET AI为从业者解锁洞察力

Google =
AI Enabled Healthcare

谷歌=启用AI的医疗保健

If AI can shape healthcare, it has to work through the regulations of healthcare. In fact I see that as one of the biggest areas where the benefits will play out for the next 10-20 years.

We had recently done work on diabetic retinopathy, it's a cause for blindness, but using AI machine learning we can detect it much better than humans can.

Sundar Pichai – CEO, Google, 10/17

DeepMind Streams =
AI Assistant for Doctors + Nurses
AI 医生助理+护士



Source: DeepMind (11/18), Google. Sundar Pichai Interview with NDTV (10/17).

中文版制作: 腾讯科技

医疗保健创新=MICROSOFT

医疗保健通过AI解决方案实现医疗保健向云的迁移

微软:智能医疗保健

Microsoft =

Intelligent Healthcare

The healthcare industry has made great strides over the last decade in helping digitize healthcare & so the next ten will be about turning those assets into better health insights, experiences & outcomes. This is where we can make a big contribution. Cloud, AI & research capabilities will play a fundamental role towards the future.

At Microsoft, we're continuing to learn & grow every day from the extensive set of partnerships that we have had in healthcare: over 168,000 healthcare organizations in 140 countries.

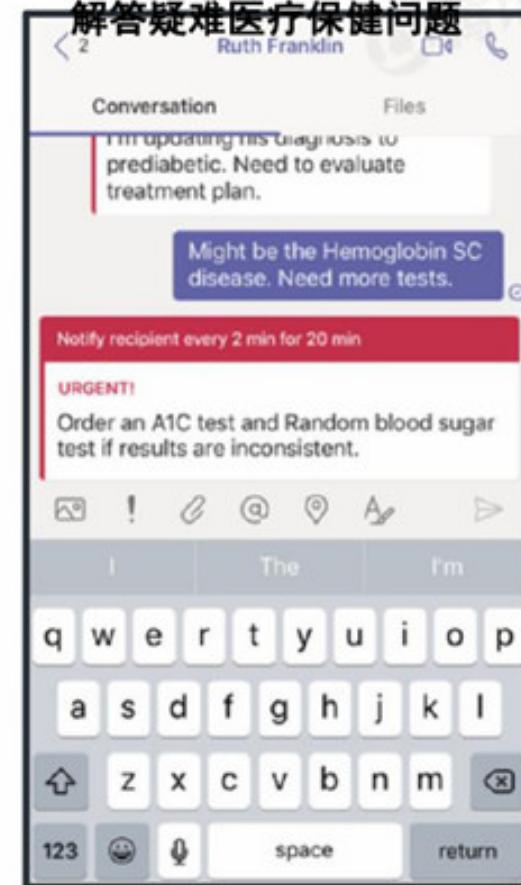
Health & wellbeing are central to our daily lives. New inventions developed with our partners using Microsoft AI & machine learning can create a better future & make healthcare delivery more personal, affordable & accessible.

Peter Lee – CVP, Microsoft Healthcare, 4/19

Microsoft Health Bot =
Troubleshooting Health Issues

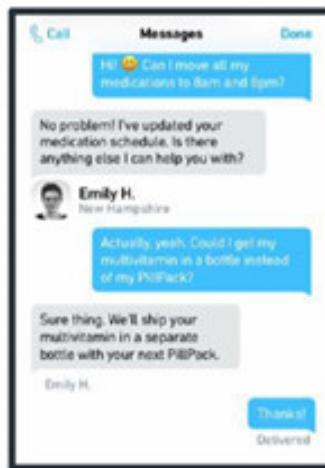
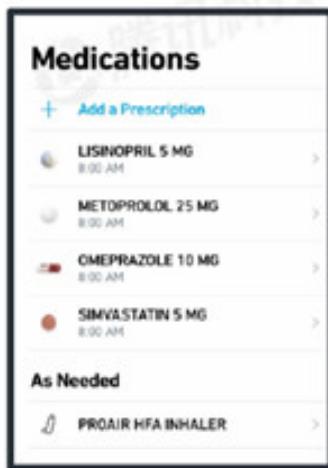
微软医疗保健聊天机器人:

解答疑难医疗保健问题



医疗保健创新=亚马逊/PILLPACK 以消费者为中心的药物管理方法

PillPack = Consumable Healthcare PILLPACK=消费品医疗保健



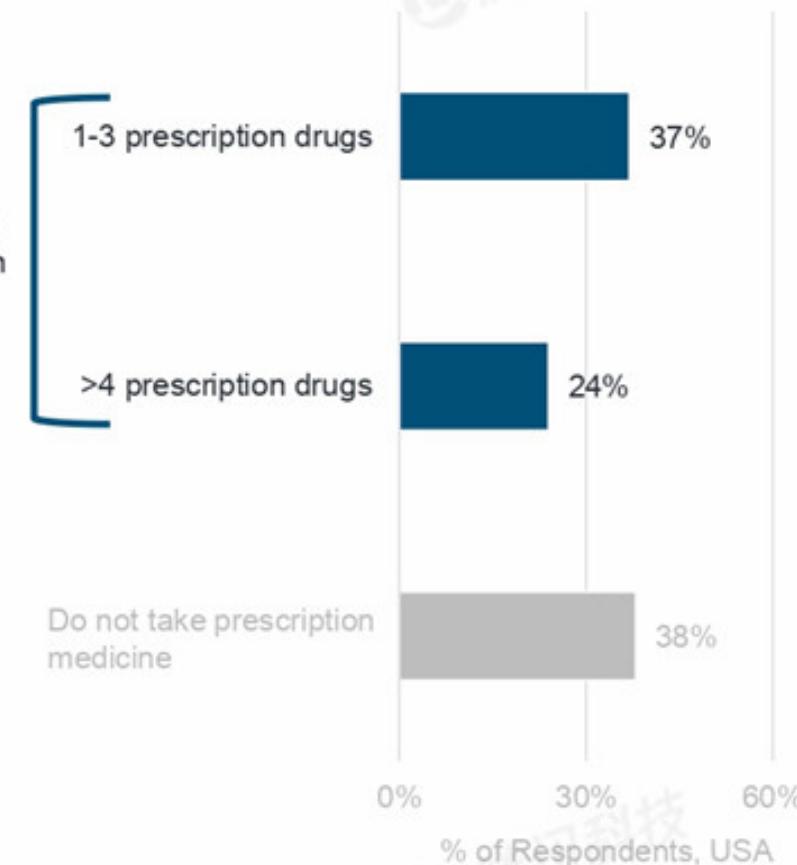
*PillPack is meaningfully improving its customers' lives & we want to help them continue making it easy for people to **save time, simplify their lives, & feel healthier.***

We're excited to see what we can do together on behalf of customers over time.

Jeff Wilke – CEO, Amazon Worldwide Consumer, 7/18

Prescription Medicine Usage = Increasingly Common 处方药使用=越来越普遍

Prescription Medicine Usage, 2019, USA

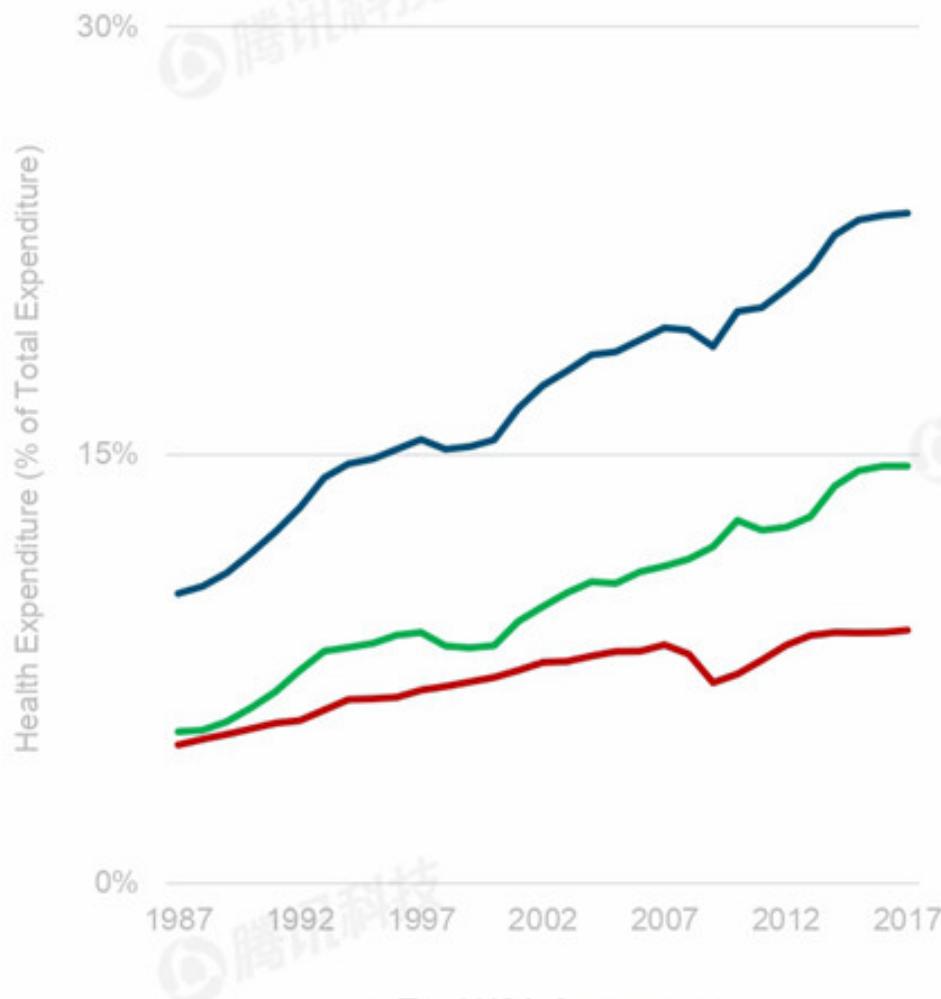


Source: Kaiser Family Foundation Health Tracking Poll (2/19). Survey of 1,400 USA adults over the age of 18, including over the age of 65, conducted from 2/14-2/19/19. Respondents were asked the question: 'Do you currently take any prescription medicine or not? IF YES: How many different prescription drugs do you take?'. PillPack press release (7/18).

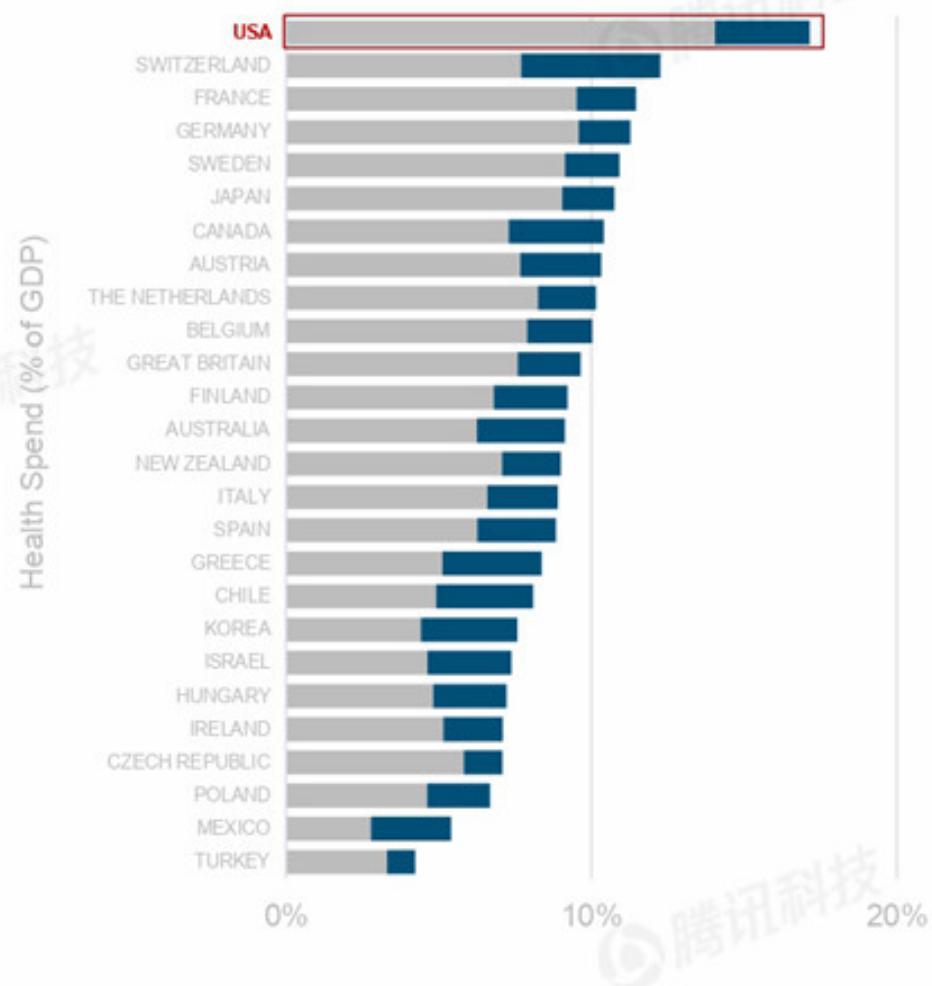
中文版制作: 腾讯科技

医疗成本=政府/消费者增加+高昂

医疗支出占美国政府支出总额的百分比



经合组织发布的统计数据，
显示2017年医疗支出占各国国内生产总值的百分比



2019中国互联网趋势报告

创新产品+商业模式领跑全球

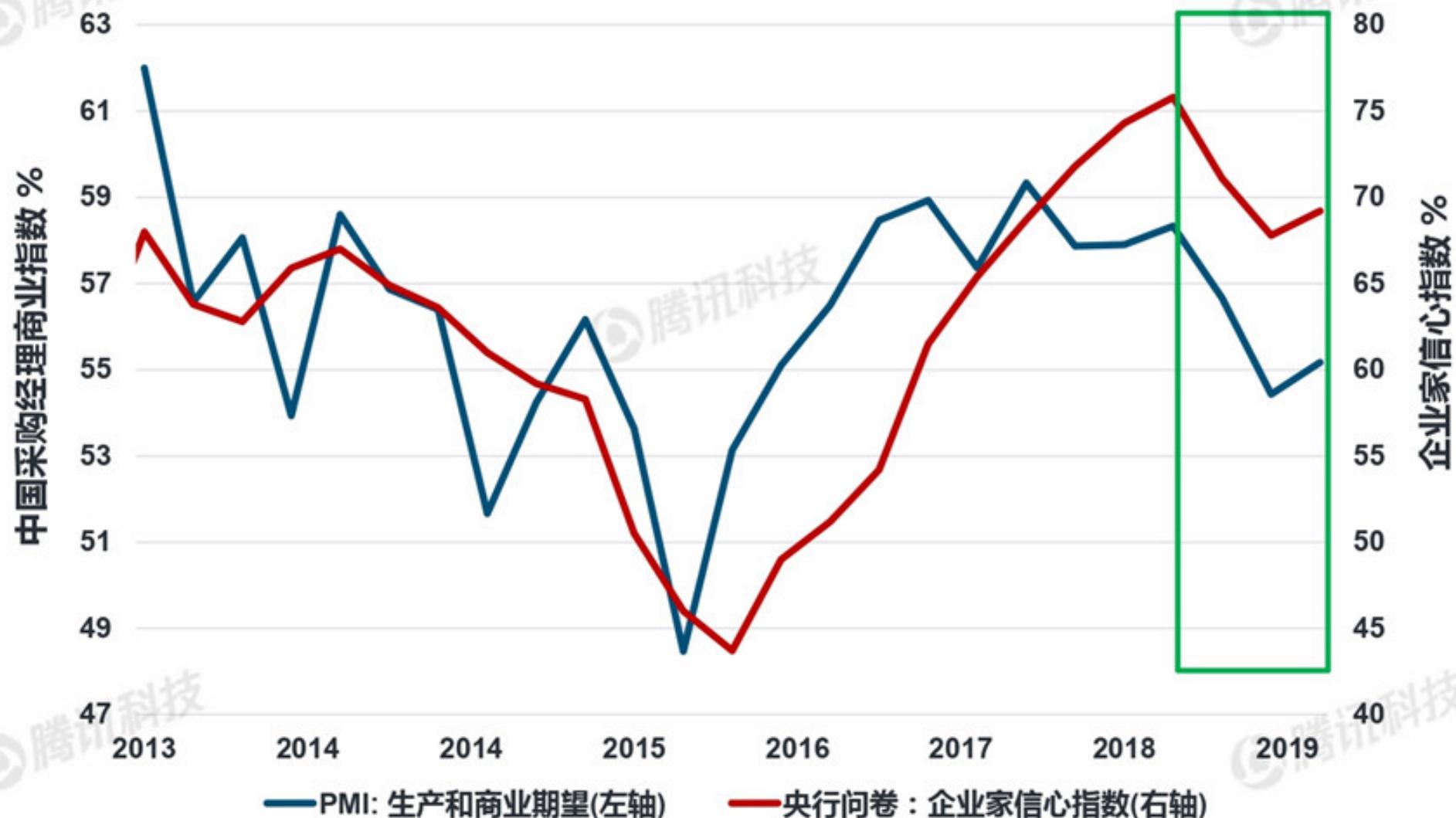


中国宏观趋势

长期稳健

中国宏观趋势 = 短期 企业信心有所波动

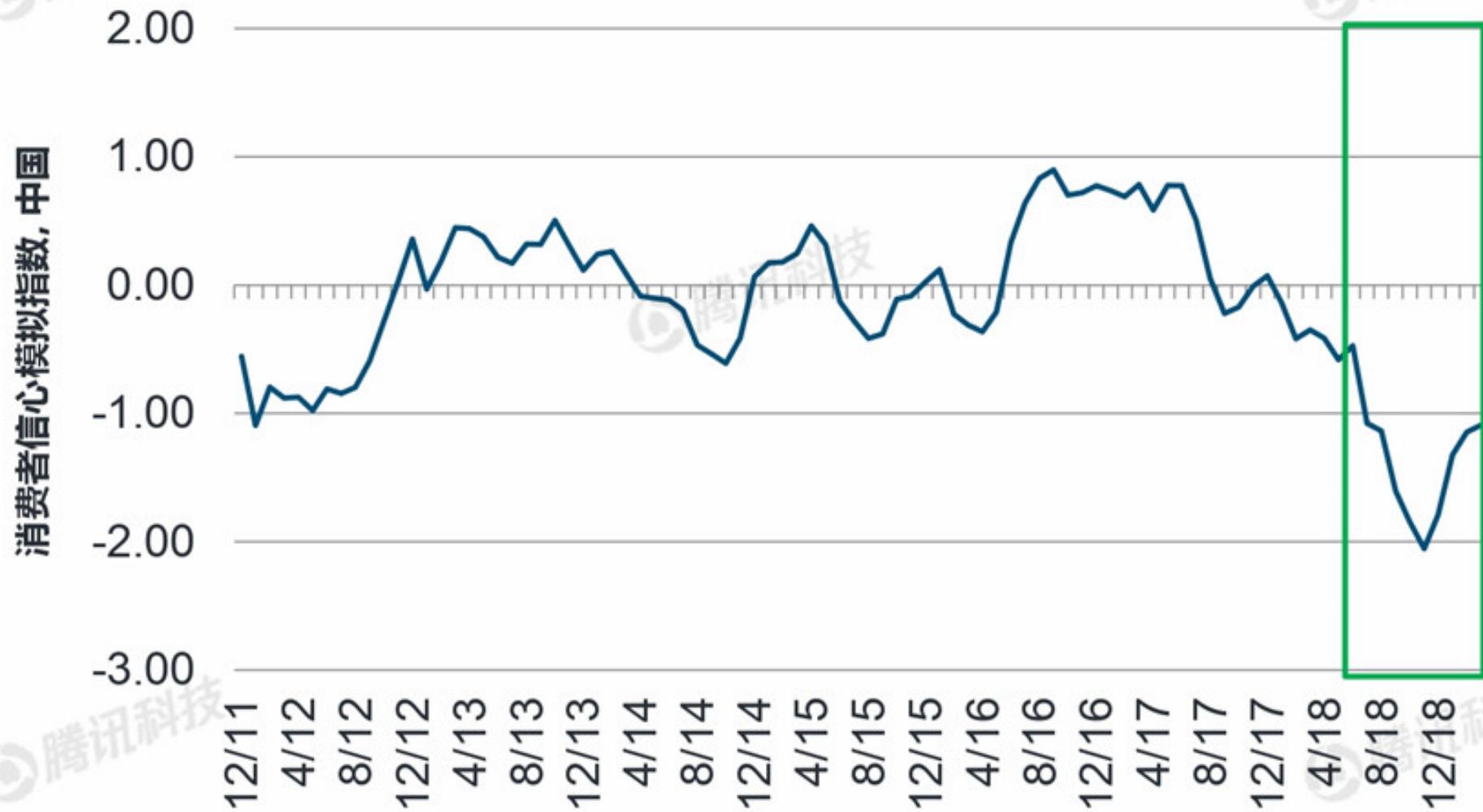
中国采购经理商业指数(PMI) +
企业家信心指数 (%), 2013-2019



中国宏观趋势 = 短期 消费者 信心有所波动

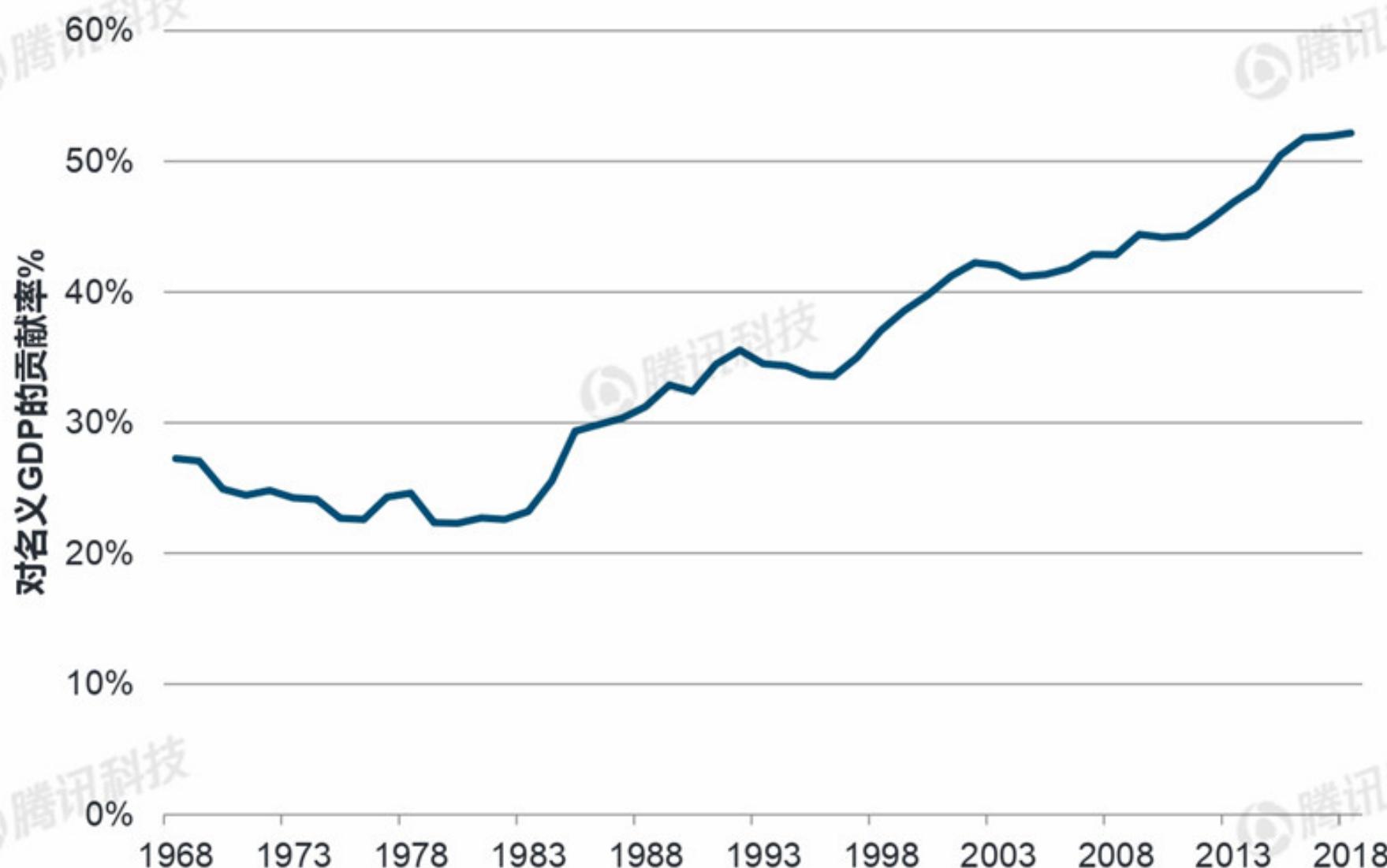
中国消费者信心模拟指数, 2011/12 – 2019/03

基于家庭房贷，消费者信心指数，乘用车销量，
航空载客数和餐饮消费的平均标准分数 (Z-Score*)



中国长期宏观趋势 服务业持续驱动经济增长

服务业在中国GDP占比
1968 – 2018

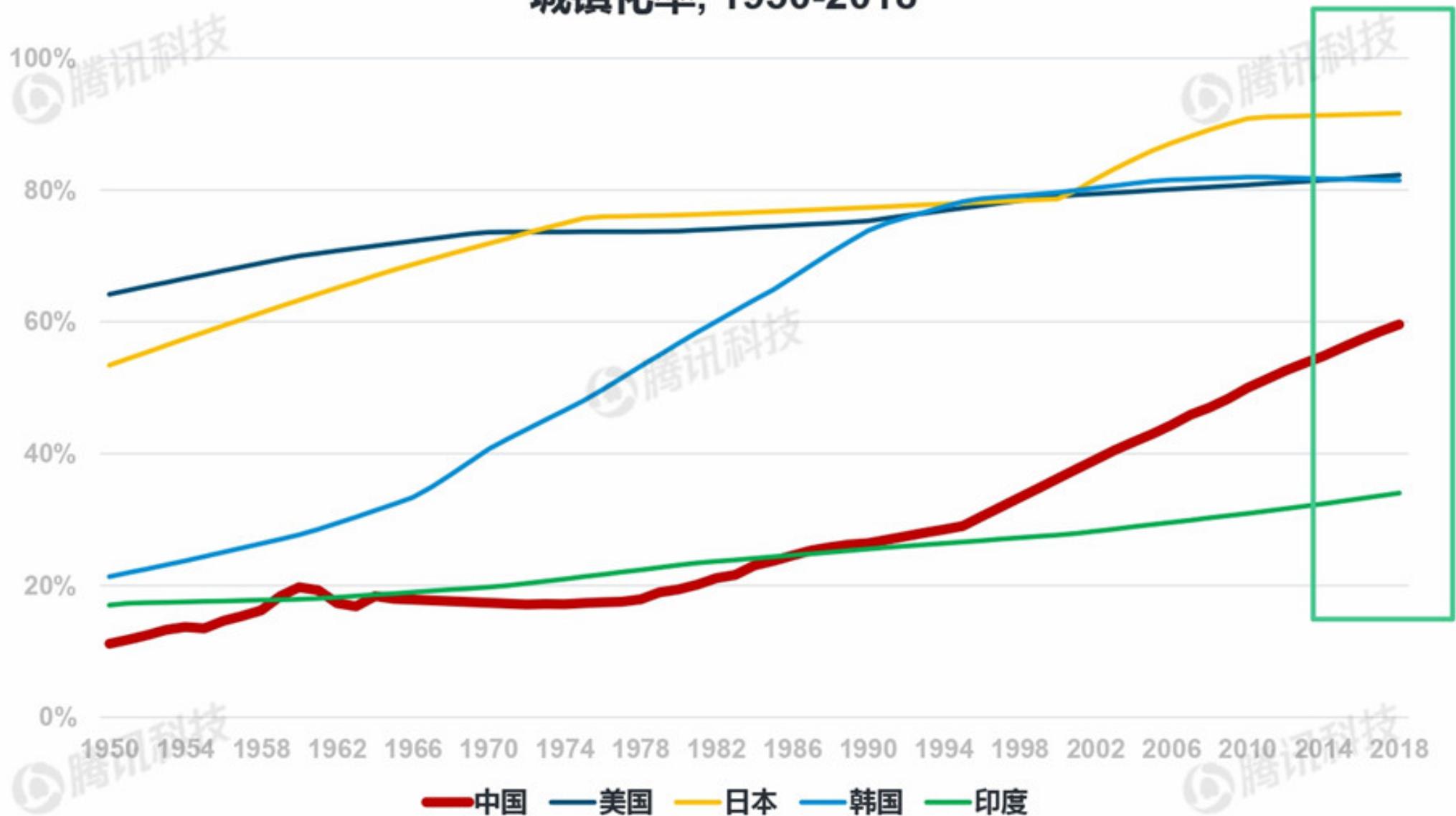


数据来源: 中国国家统计局, Morgan Stanley Research

注: 服务行业定义为非农、林、牧、渔业(不含农、林、牧、渔业服务业)、采矿业(不含开采辅助活动), 制造业(不含金属制品、机械和设备修理业), 电力、热力、燃气及水生产和供应业, 建筑业

中国长期宏观趋势 城镇化进程不断加速，且仍有空间

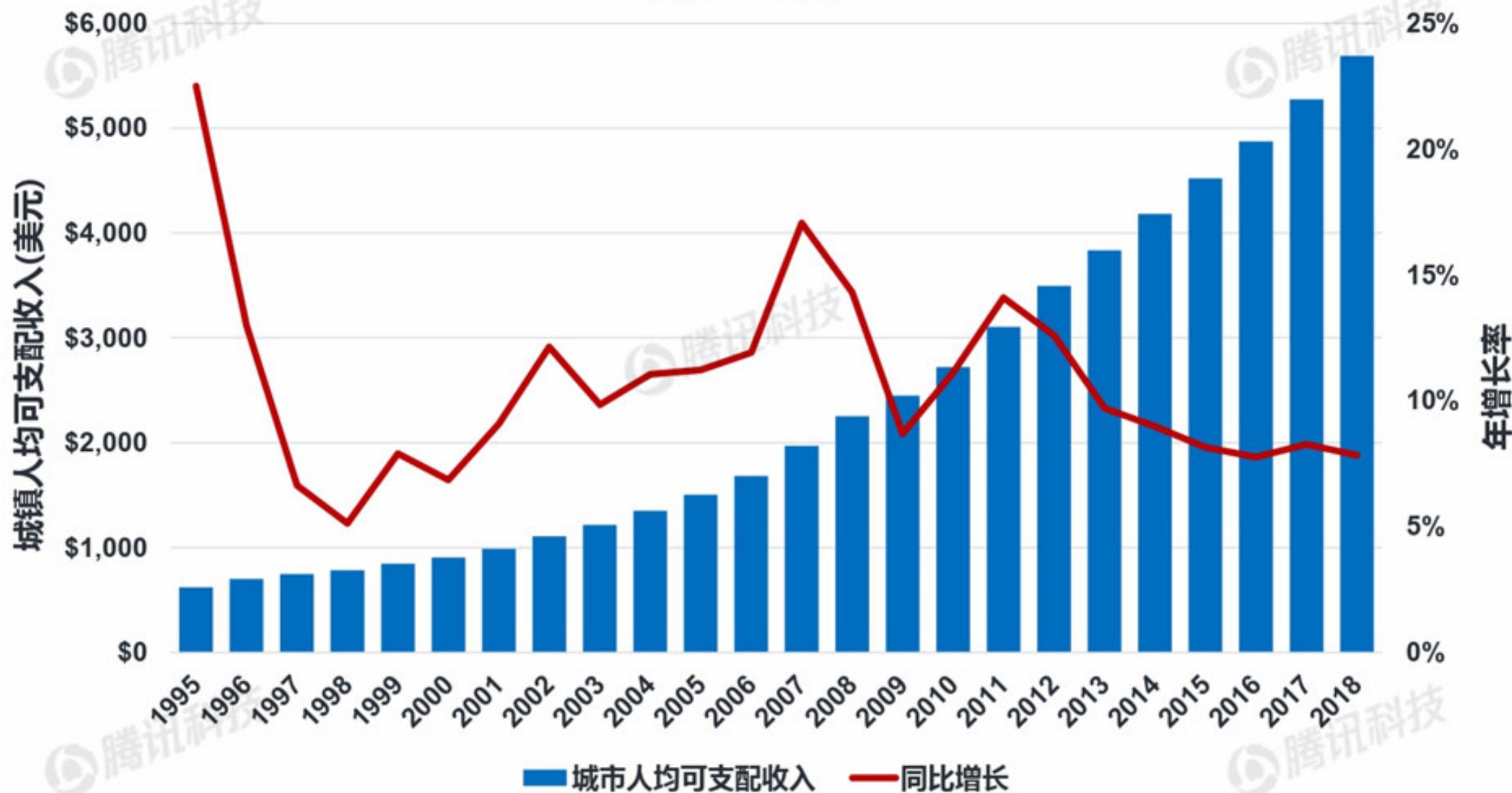
城镇化率, 1950-2018



中国长期宏观趋势

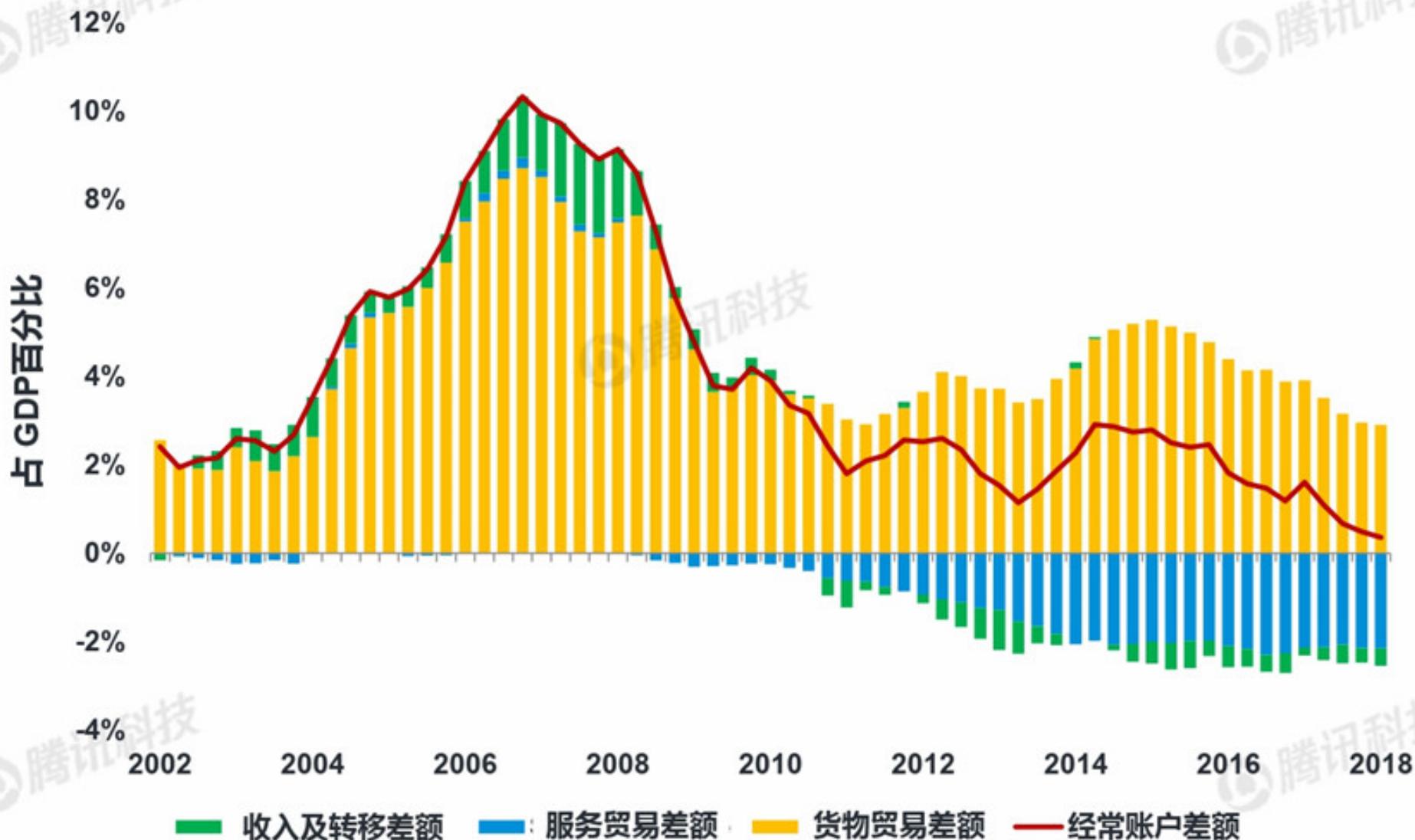
城镇人均可支配收入增速仍然可观，同比增长8%

中国城镇人均可支配收入 & 年增长率
1995 - 2018



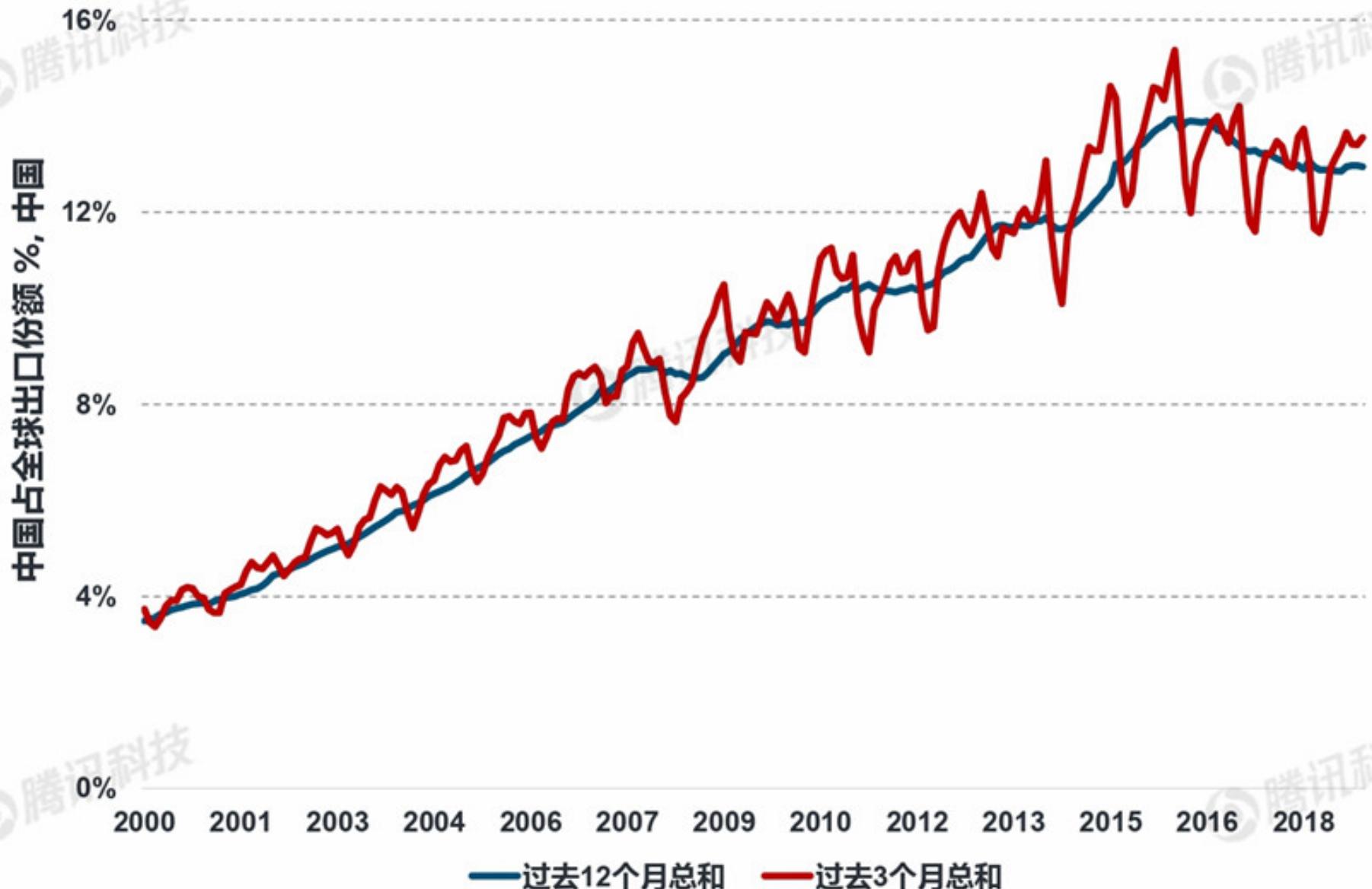
中国整体贸易顺差逐年减少
货物出口占比下降，同时出境游快速上涨导致服务贸易逆差

中国贸易经常账户差额(货物，服务，收入及转移), 2002-2018



中国占全球出口份额
由于工资增长和劳动力老龄化，已从2016年开始缩减

中国占全球出口份额 (%),
2000-2018



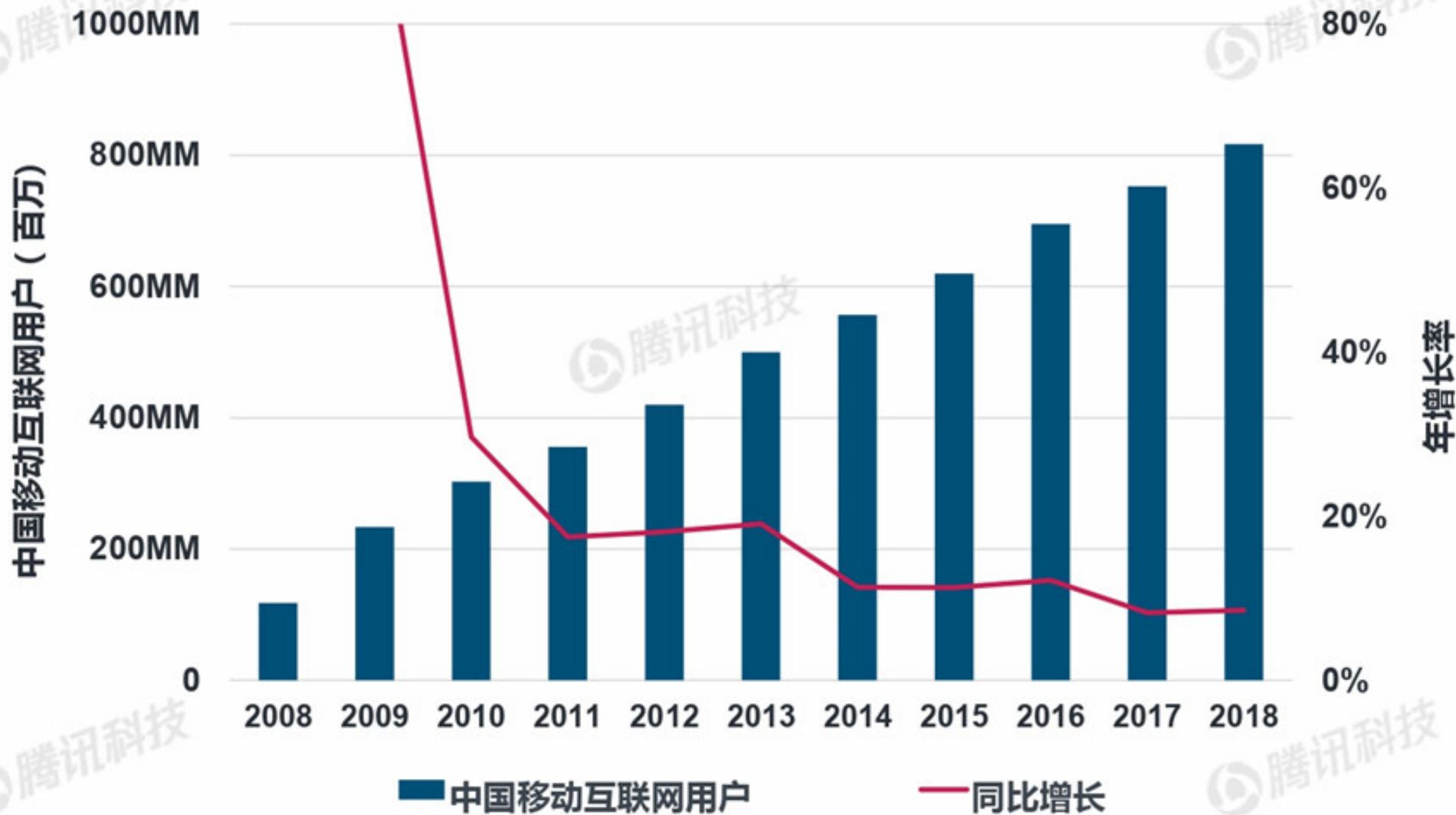
中国互联网用户 / 时长

短视频驱动时长稳健增长

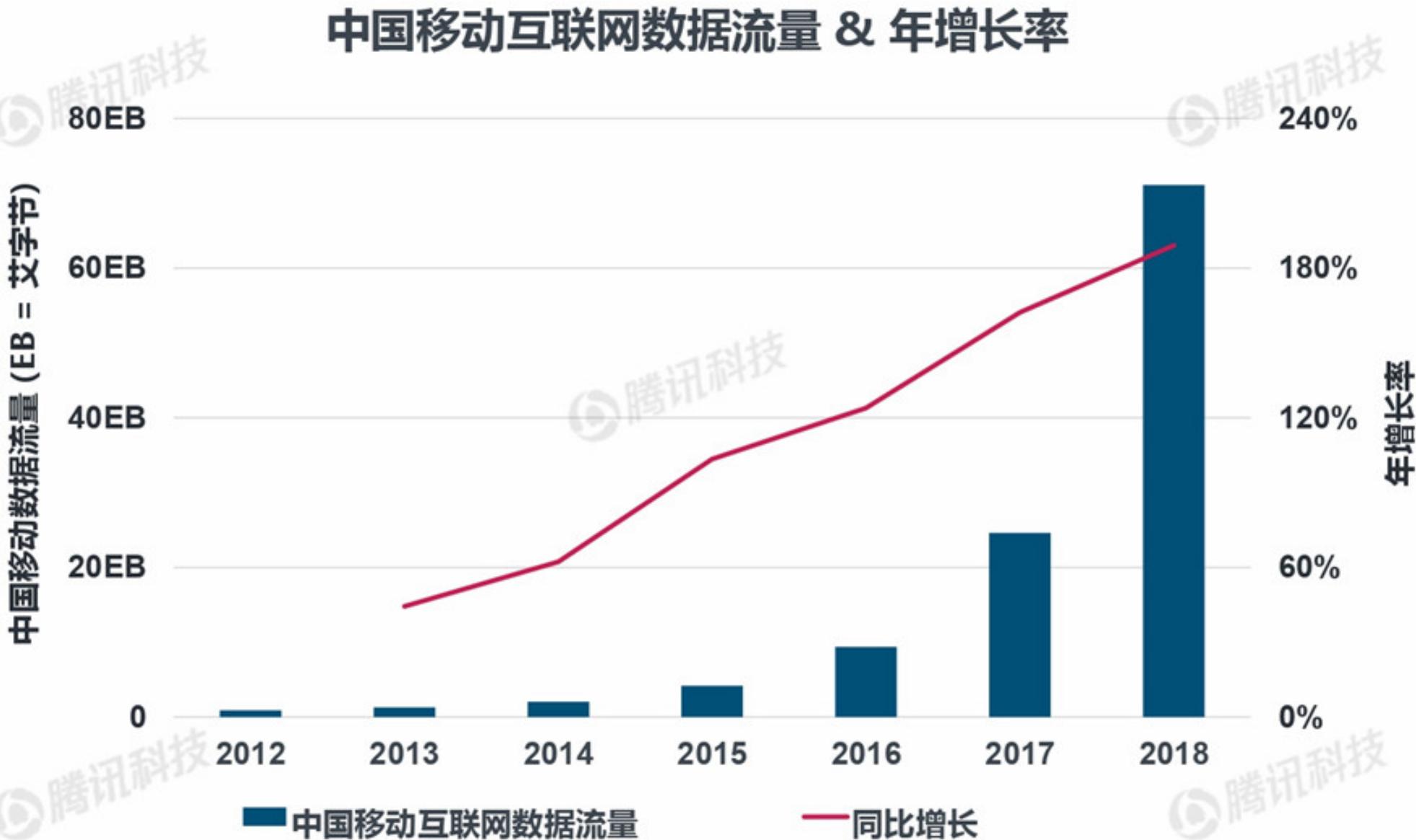
中国移动互联网用户规模达到8.2亿

2018年同比增长9%

中国移动互联网用户规模 vs. 年增长率

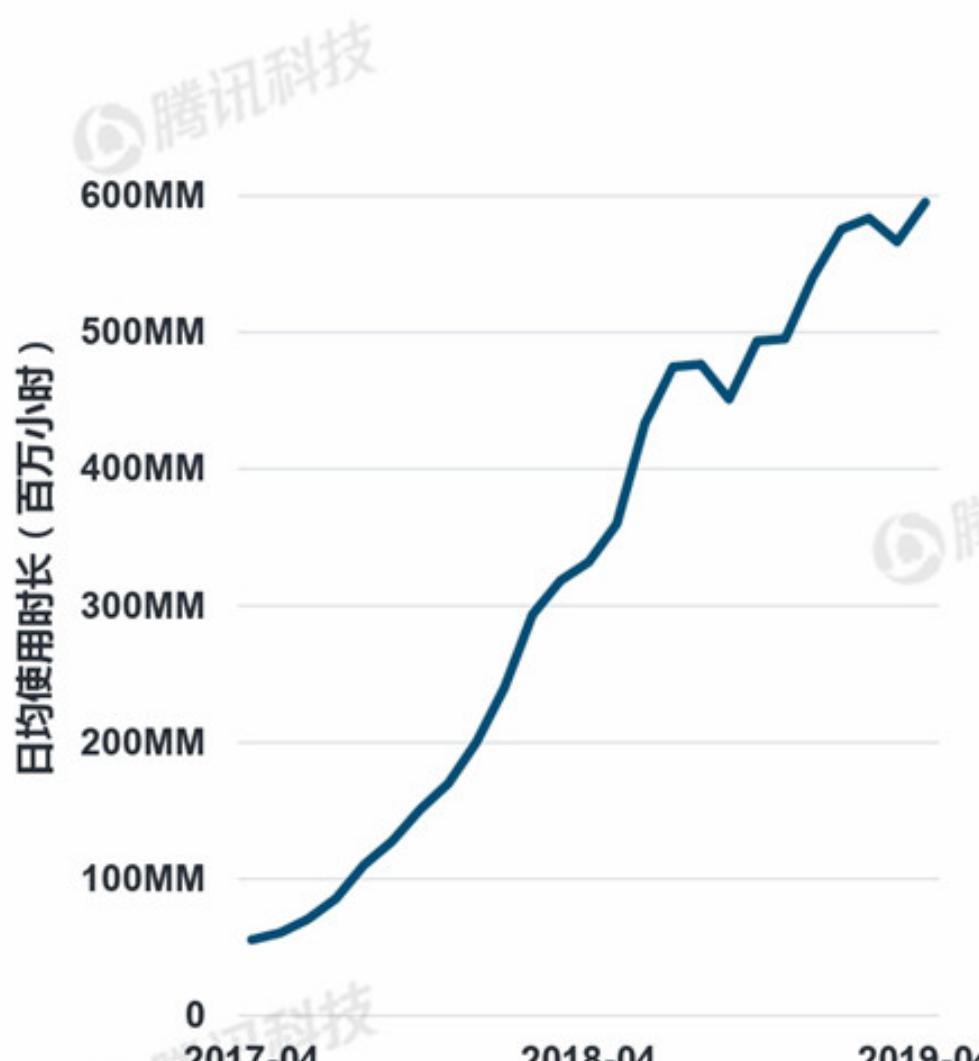


2018年中国移动互联网数据流量同比增长189%
增速仍然在逐年加快

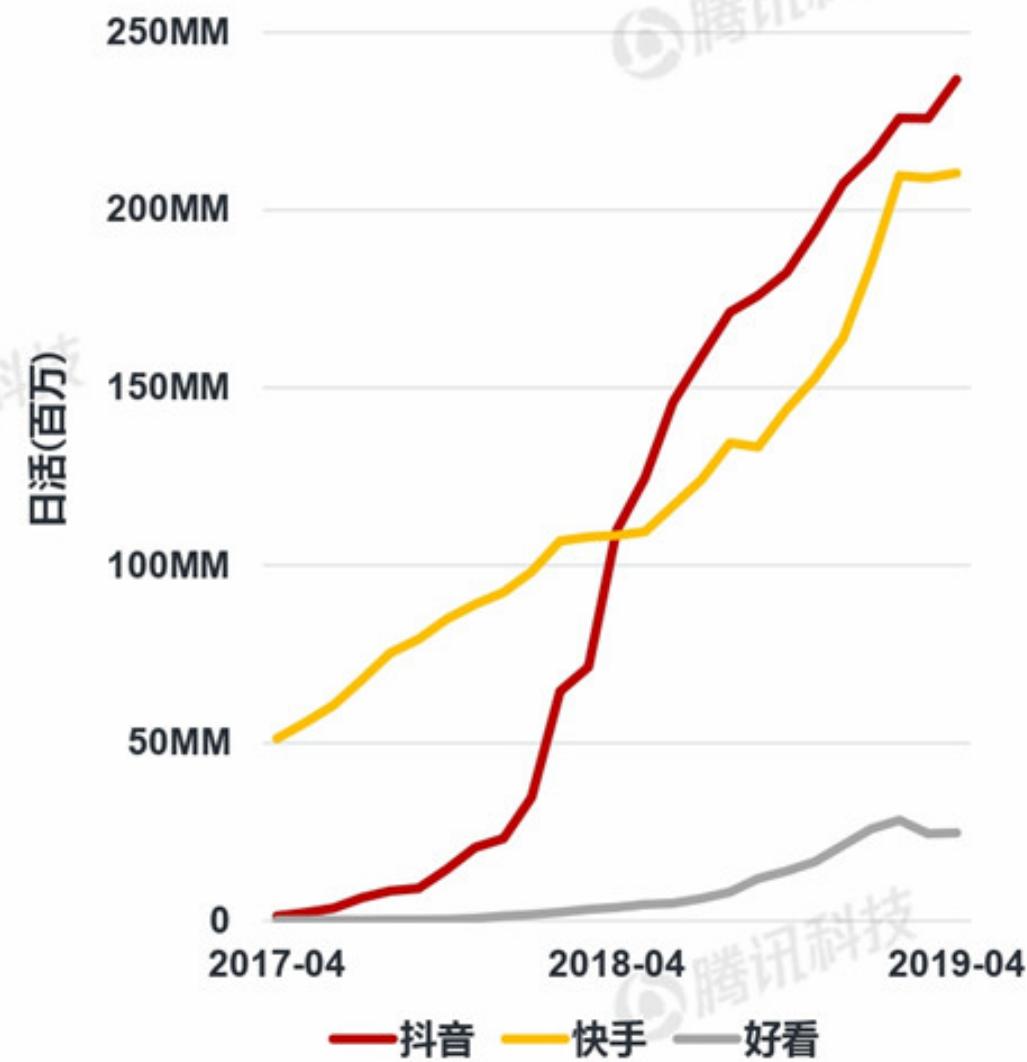


中国短视频App 引领用户数量和时长增长

中国短视频日均使用时长

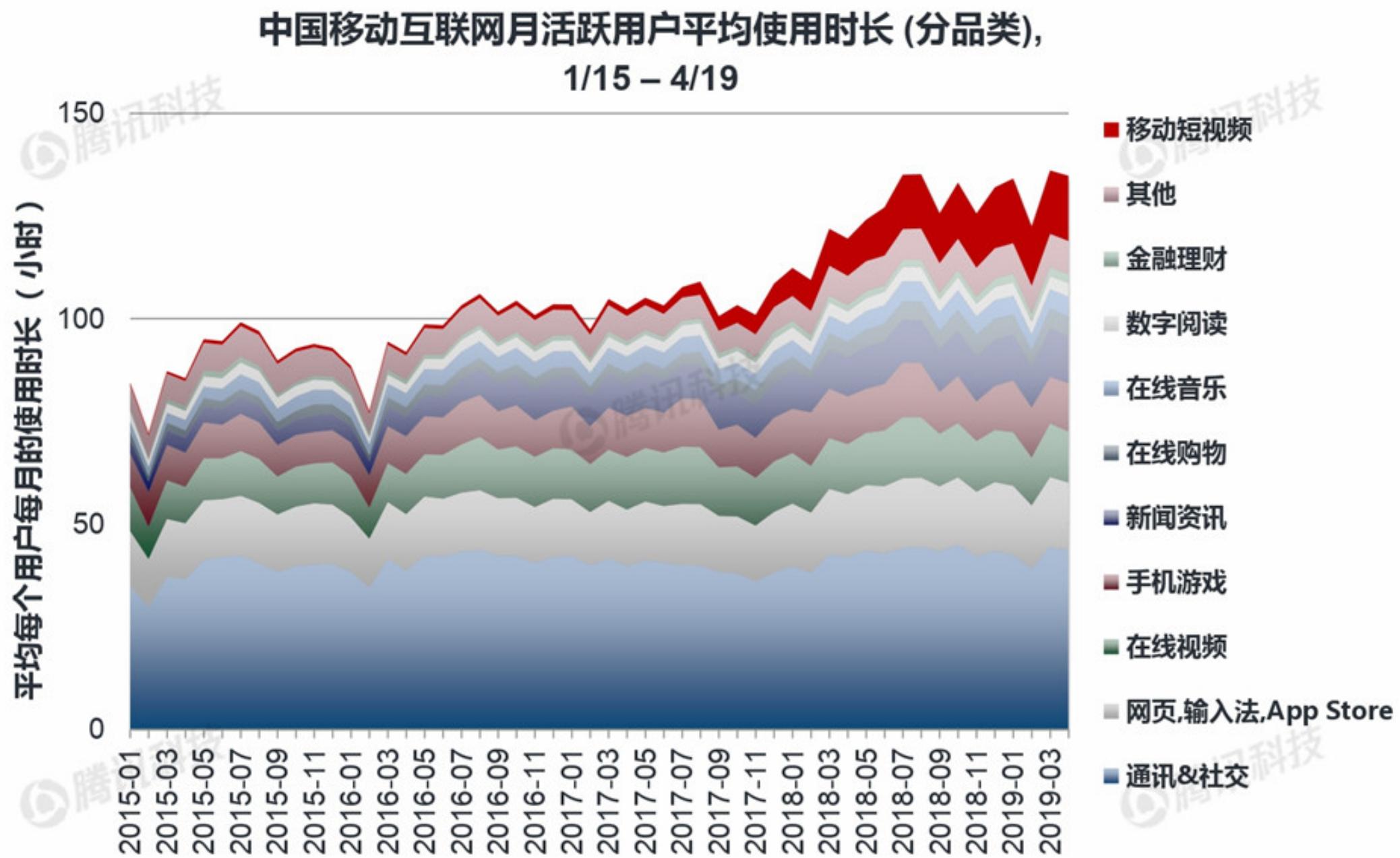


头部短视频平台日均活跃用户



数据来源：QuestMobile, 2019年4月。注：短视频通常指时长小于5分钟的视频，包括快手，抖音，百度好看等。

短视频占用户整体时长比例上升
并且主要带来 增量 时长



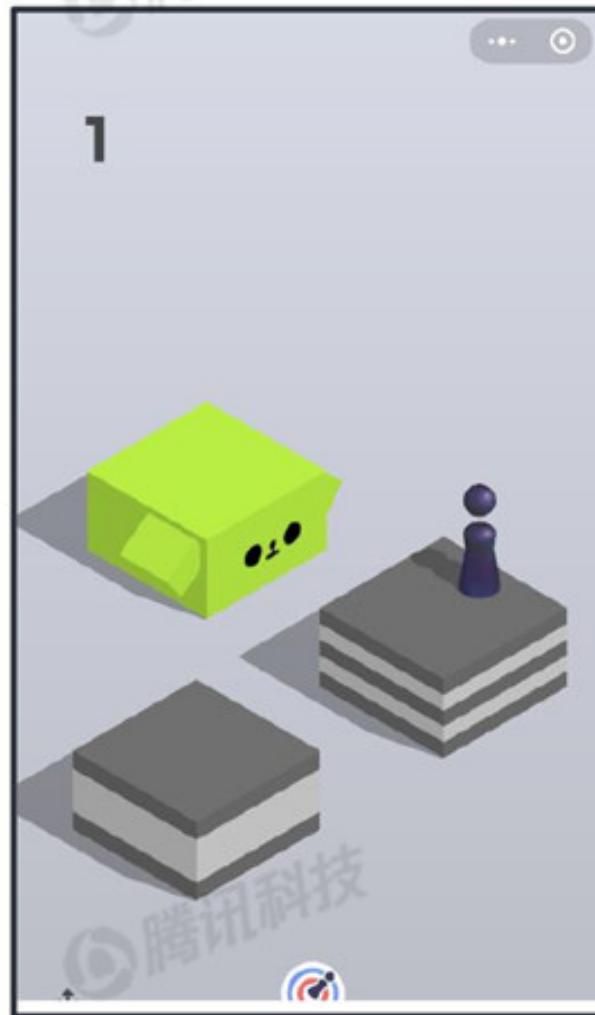
中国原创创新

游戏改变支付，电商，零售，教育
以及更多行业...

微信小程序

从一个小游戏开始，发展到庞大的小程序生态系统

跳一跳
第一个小程序游戏
推出后两周内日活达到1亿+



**优衣库
品牌**
购买转化率高于行业~3倍



**全民K歌
娱乐**
7300万+月活



**拼多多
电商**
8900万+月活



**二维码
公共交通**
4800万+月活



**同程艺龙
旅游**
1.69亿+月活



**小年糕
图片编辑**
2.14亿+月活



支付宝 蚂蚁森林 游戏化公益为环境保护做出贡献的同时，也帮助提升用户活跃度

蚂蚁森林

通过完成减少碳排放的任务
(步行/骑车/公交/线上+线下支付/回收/二手) 累积绿色能量积分

通过早起和经常登录保护虚拟树的积分或者“收取”朋友的能量

蚂蚁金服和其他慈善机构根据虚拟树的绿色能量积分在荒漠化地区种下真树

5亿
支付宝内蚂蚁森林
累计用户数*



1亿
种下的真实树
数量*

~4次
用户平均每天打开支付宝次数**

拼多多 社交+游戏驱动线上购物高速增长

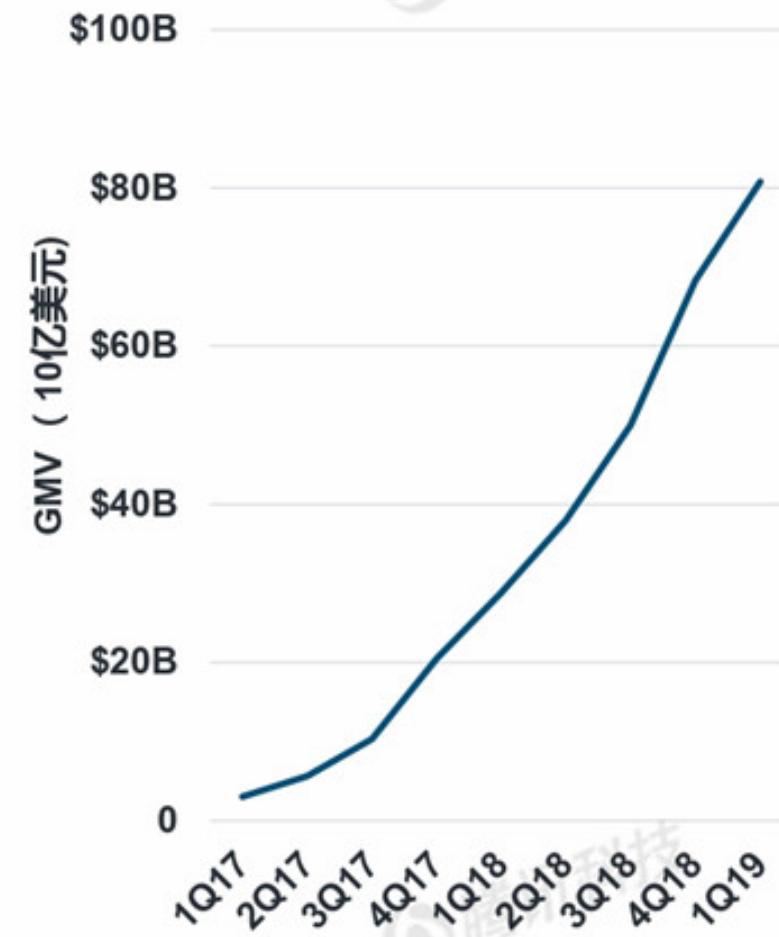
喊好友砍一刀
(分享给朋友以得到更便宜的
价格)



朋友可以玩游戏
并且帮忙砍价



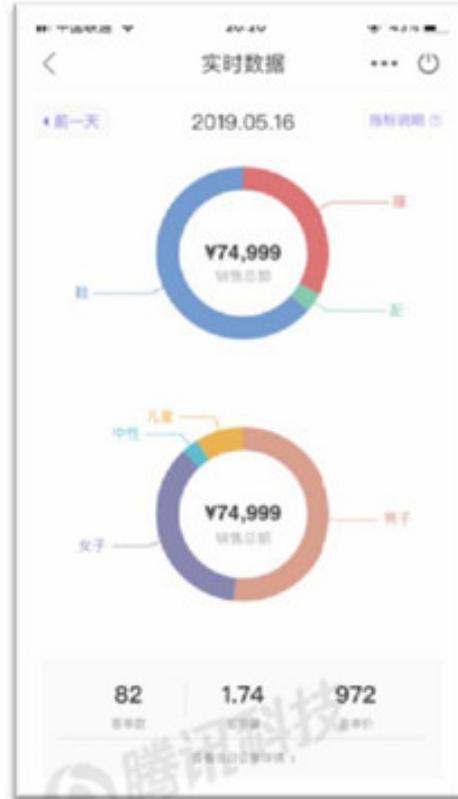
拼多多
最近12个月滚动GMV



百丽 / 滔搏 数字化 + 游戏化驱动同店销售增长

店长版

实时数据 销售金额分品类& 库存



员工关键业绩指 标和对比排名



店员版

游戏化的奖励促 使店员完成关键 业绩指标



在线教育 游戏化数学和编程教学

好未来(学而思)网校
游戏化数学教学



编程猫
玩游戏学编程



卡通 + 学生PK =>
使线上学习效果更好



中国原创创新

互联网驱动的
产品和商业模式创新

**即时通讯
带动
交易+服务**

微信创新 聊天带动小程序与支付发展

微信公众号
关注

微信小程序
浏览商品

微信小程序
下单

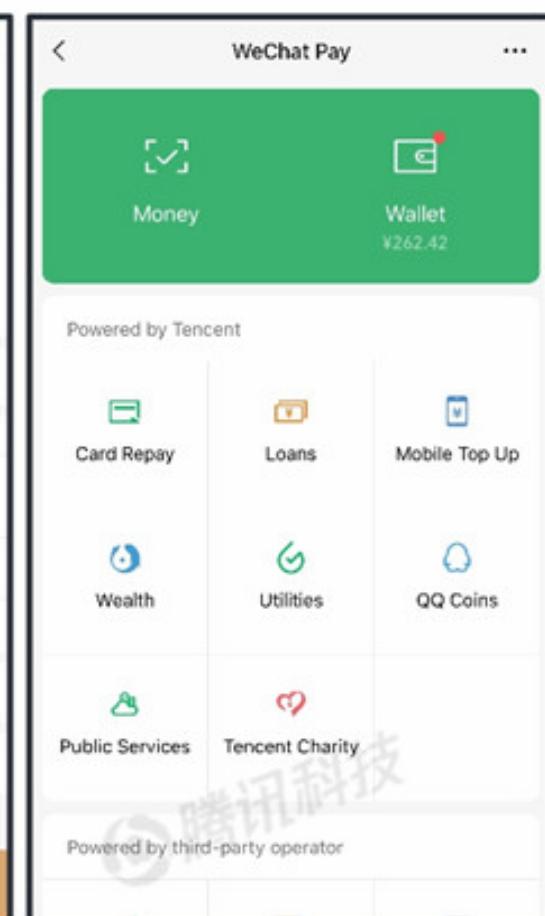
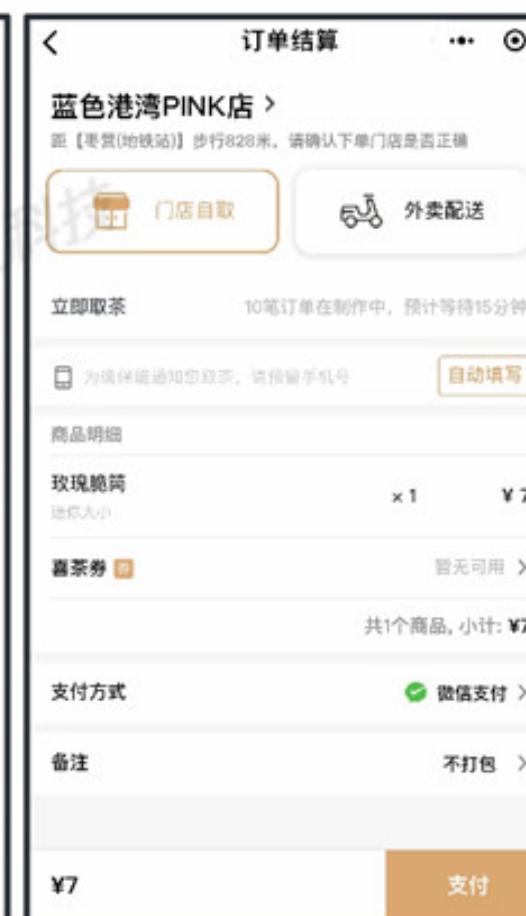
微信支付
完成支付

1

2

3

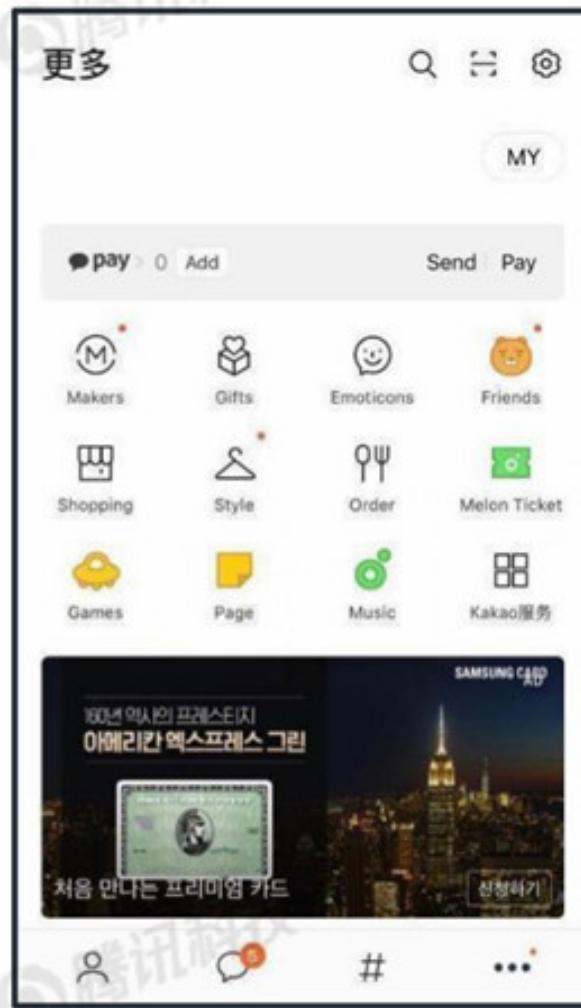
4



海外互联网公司逐步采纳微信策略 Kakao / Line / Facebook 开始加入交易功能

Kakao (韩国)

聊天 / 交通 / 游戏 / 音乐 / 支付...



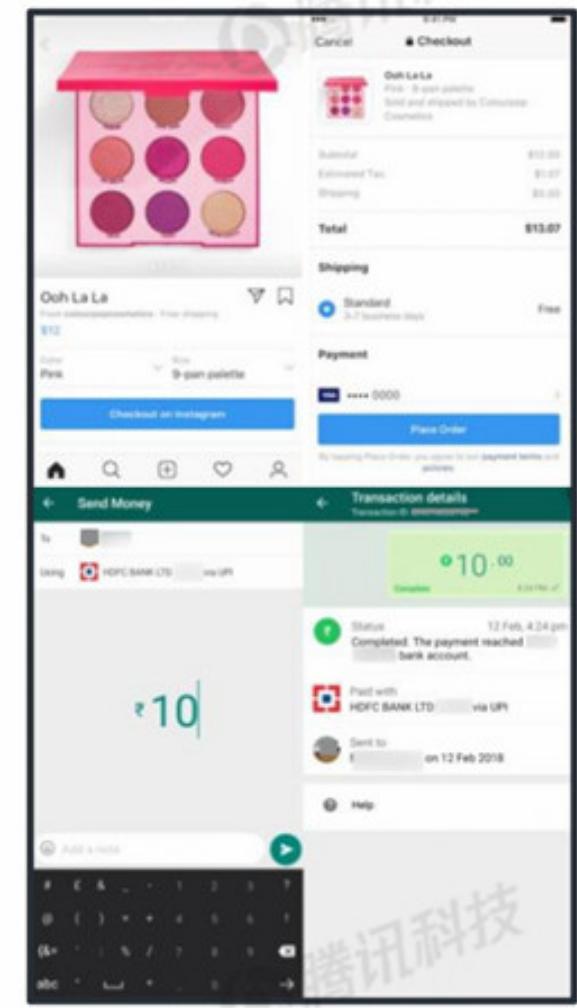
Line (日本)

支付 / 服务 / 游戏 / 打折券...



Instagram / WhatsApp

购物 / 聊天 / 转账...



**本地生活
进化成
超级App**

美团 – 始于团购，进化成超级App
聚合30种以上本地交易服务...4.1亿年交易用户，同比增长26%+

美团App的各项功能 vs. 美国的类比公司

餐馆点评



餐馆预订



电影/演出

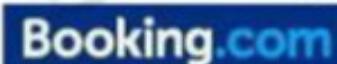


FANDANGO

民宿/公寓



酒店预订



POS



Square

外卖



机票/火车票

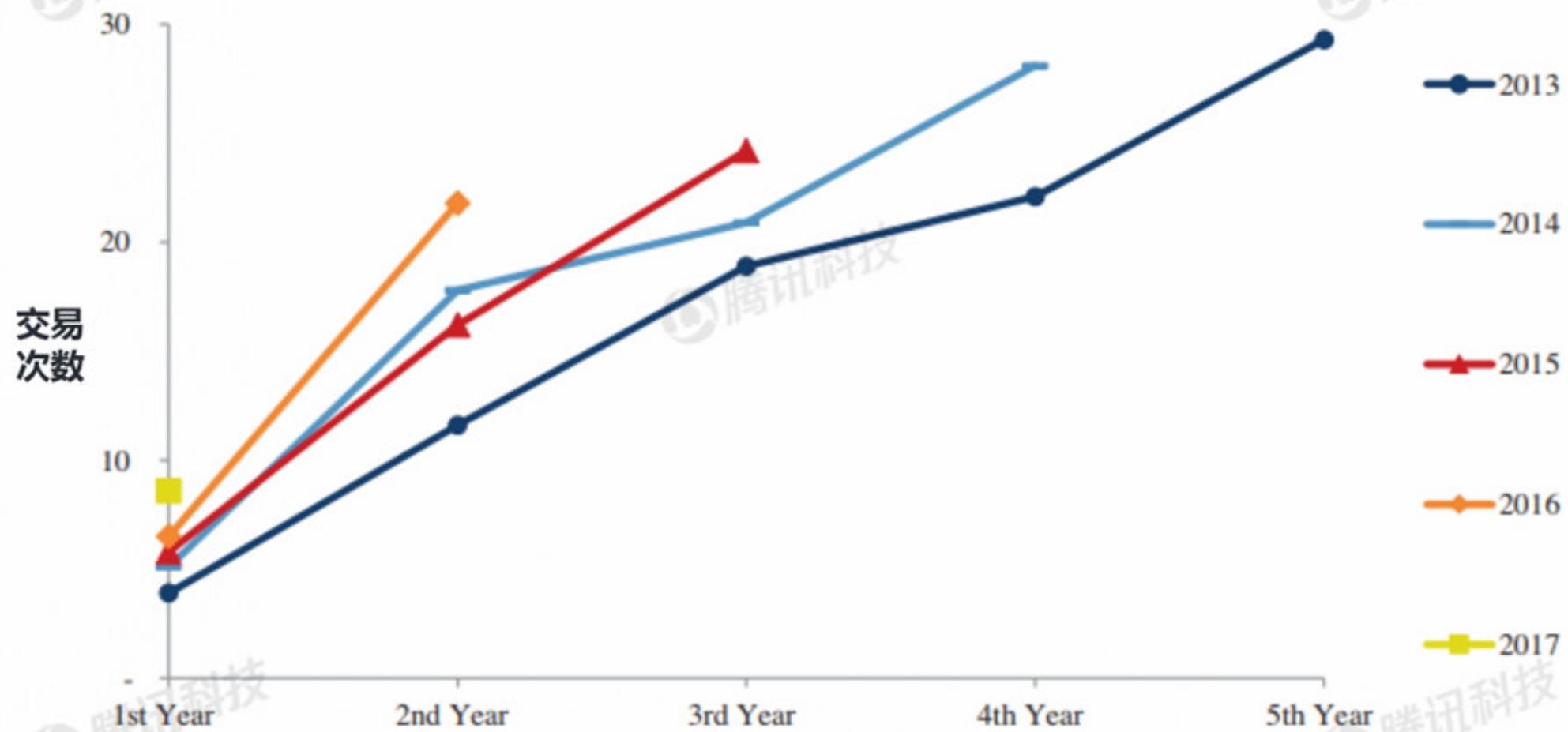


超市/生鲜



超级App提升了用户的活跃度和交易频次

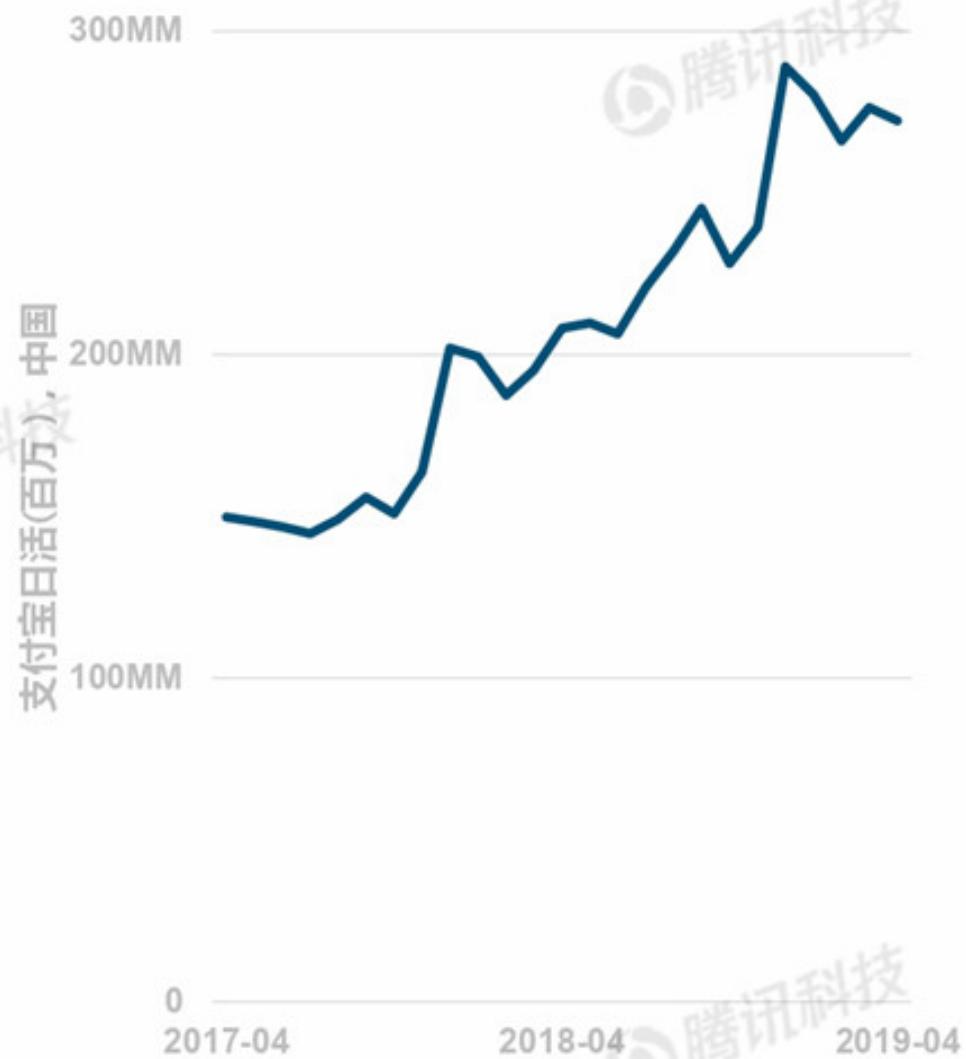
美团平台用户年均交易次数分组分析,
2013 - 2017



支付宝 - 始于电子钱包，进化成超级App 超过20万小程序，10亿全球用户，70%使用3种以上金融类服务*



支付宝中国日活用户规模

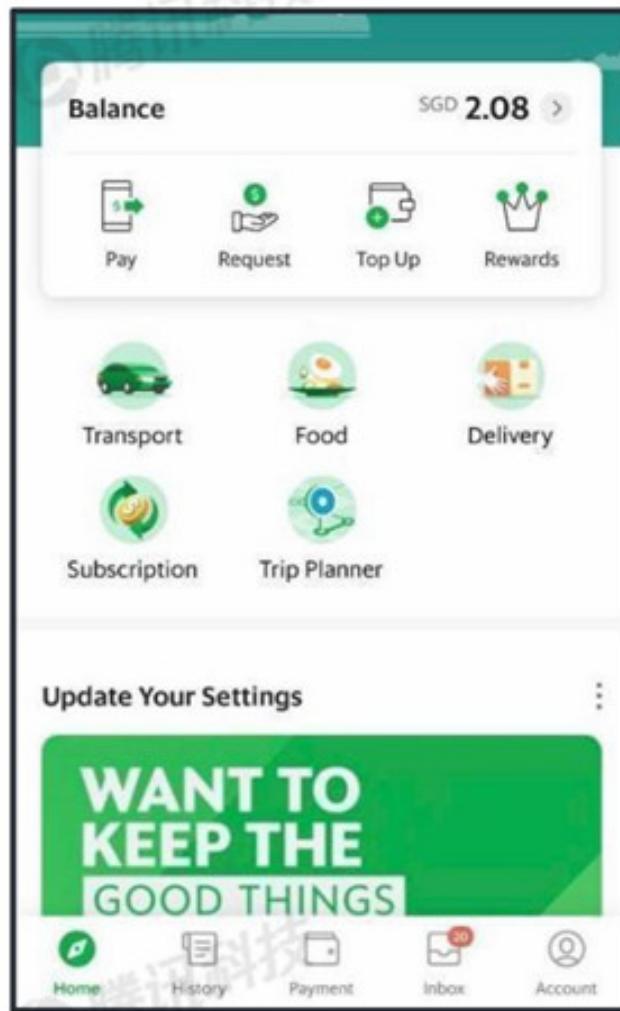


海外公司逐步采用超级App战略

Grab / Rappi / Uber

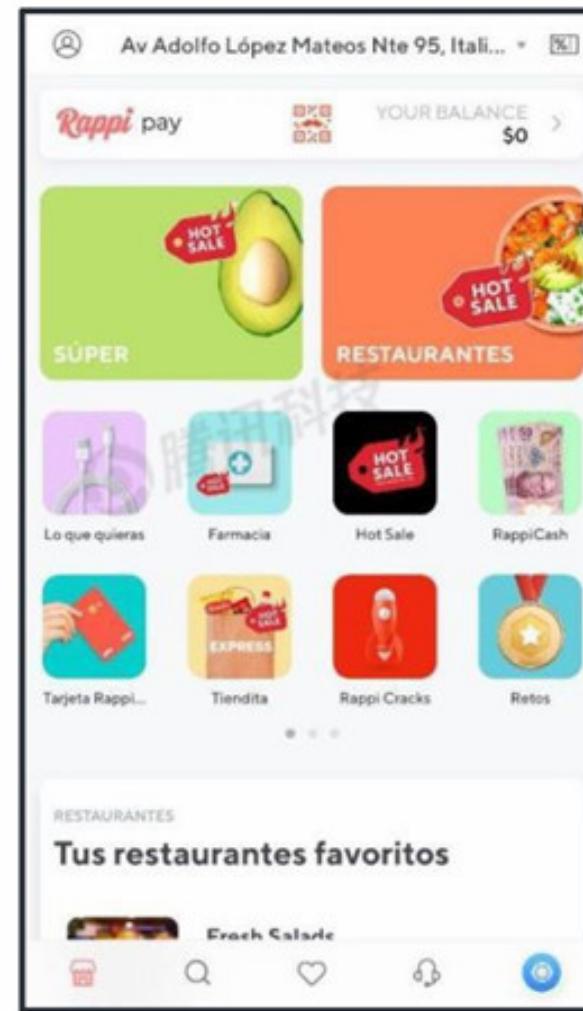
Grab (东南亚)

出行 + 外卖 + 支付 + 快递...



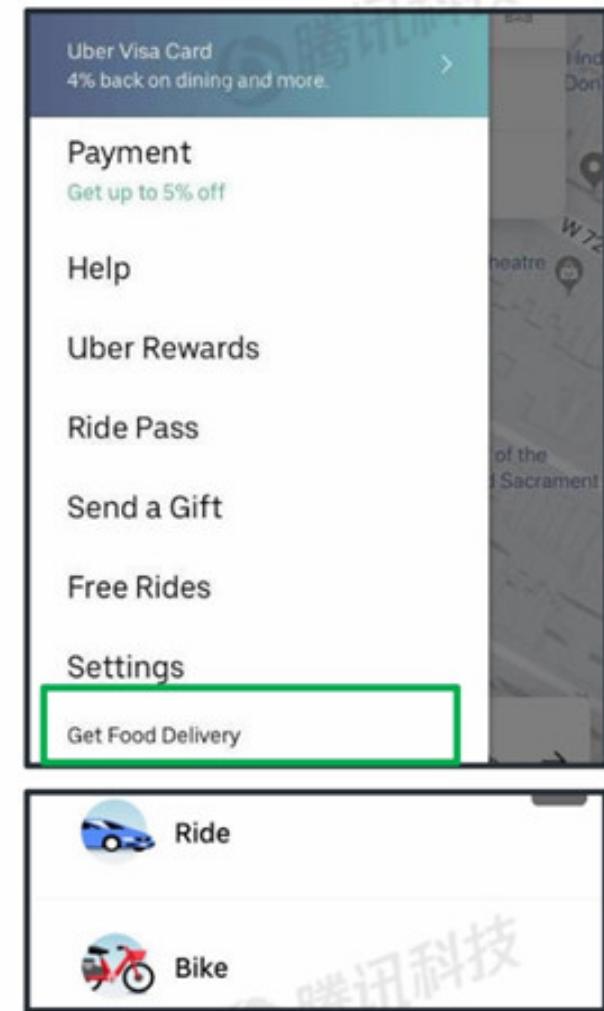
Rappi (拉美)

外卖 + 生鲜 + 更多...



Uber

打车 + 外卖 + 自行车 + 货运...



零售创新

线上 / 线下 / 全渠道

线上零售创新 移动直播带来个性化、互动的购物体验，大幅提升交易转化率

淘宝直播

2018直播GMV
超过1000亿人民币



快手

直播购物 & 快手小店



蘑菇街

直播贡献了24% 的 GMV
复购次数提升4倍*



生鲜零售创新

全渠道、线上配送、社区拼团、闪送等多种模式百花齐放

盒马鲜生 / 7Fresh...

- 自营店铺
- 自提或者配送到家
- 盒马 - 135+ 家门店



每日优鲜/ 叮咚买菜 / 朴朴生鲜...

- App下单，前置配送仓取代了实体店
- 30分钟送到家
- 自营库存 + 配送



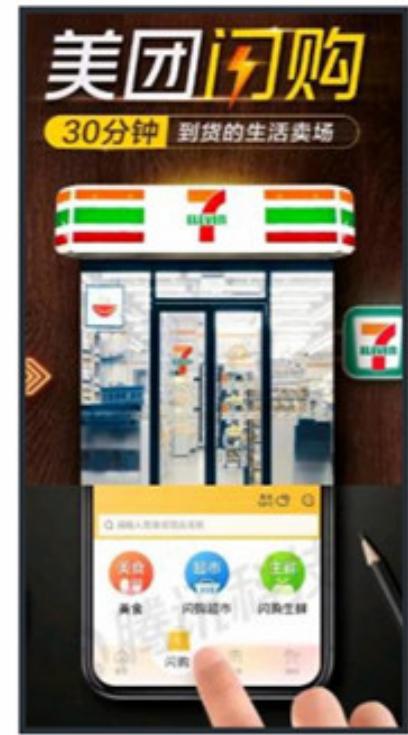
兴盛优选/ 松鼠拼拼 / 呆萝卜...

- 通过App或者在微信小程序的社区拼团下单
- 第二天送到社区分拣中心 + 自提
- 加盟的社区合作商/社区团长



美团 / 饿了么 / 淘 鲜达 / 京东到家...

- App下单
- 30分钟送到家
- 合作的店铺备货，美团 / 饿了么 / 淘鲜达 / 京东负责配送



阿里巴巴新零售战略

线下零售数字化

盒马
135+家生鲜门店



大润发
470家超市门店数字化改造



苏宁
电子产品



银泰
时尚百货



居然之家
室内装修



饿了么 & 口碑
负责2,100+家
星巴克门店配送



天猫优品
乡镇全渠道门店



零售通
100万+社区店数字升级



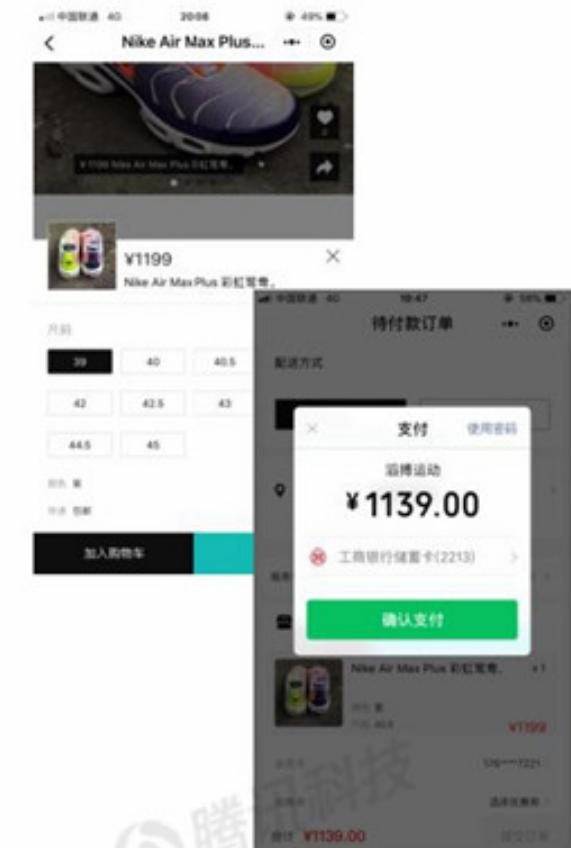
线下零售创新 – 微信群 + 小程序帮助提升百丽/滔搏试点门店的销售额

在店内扫二维码
加入微信群

通过店员推送收到
最新的产品信息

通过微信公众号收到
最新的品牌信息

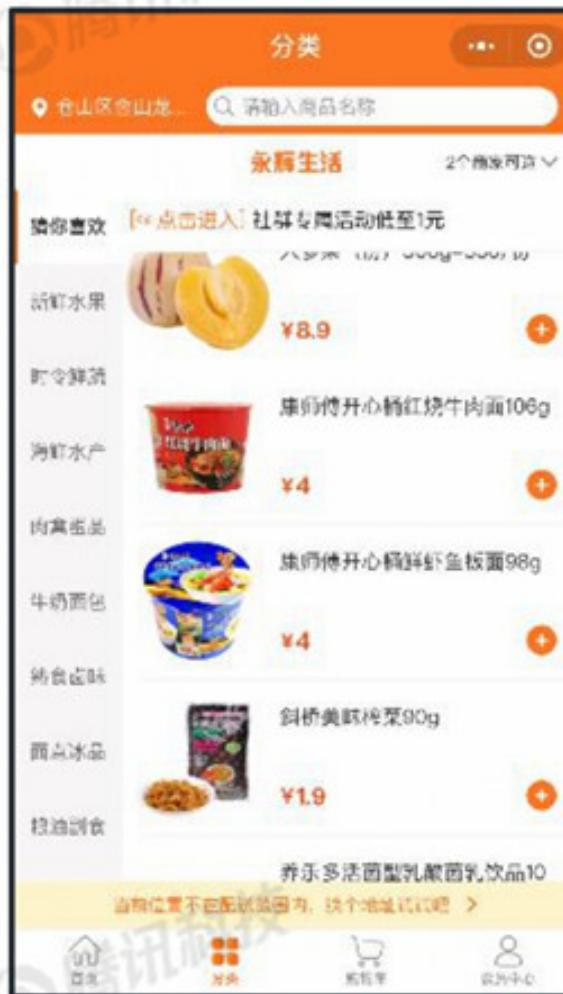
通过微信小程序
购买+ 完成购买



数据来源: 百丽.

永辉超市=重构线下零售体验

送货到家占试点区域门店
单量的15%



到家业务小程序订单
贡献量达到50%



在微信群聊发红包
提升活跃度



教育创新

从线下蔓延到线上

中国在线K-12教育 线上和线下一体化，直播 + 双师模式 + 作业解题...

学而思网校(好未来) K-12在线直播团课

The screenshot shows the homepage of Xueersi NetSchool. At the top, there are navigation links: 同步课 (Synchronous Classes), 专题课 (Special Courses), 讲座 (Lectures), 1对1 (1-on-1), 学币 (Learning Points), and 高一 (Grade 1). Below this is a promotional banner for "中学陪读僧 FM" (Middle School Companion僧 FM) with the tagline "陪伴孩子上线，伴你走过中高考~". A search bar labeled "搜索老师/课程" is present. The main content area displays four course categories: 高一数学直播班专区 (High School Math Live Class Special Zone) at 599元起 (from 599 yuan), 高一物理直播班专区 (High School Physics Live Class Special Zone) at 599元起 (from 599 yuan), 高一化学直播班专区 (High School Chemistry Live Class Special Zone) at 599元起 (from 599 yuan), and 高一英语直播班专区 (High School English Live Class Special Zone) at 599元起 (from 599 yuan). Each category includes a price of 599元起, a count of over 10,000 buyers, and a note that 36, 10, or 12 courses are available respectively. At the bottom are icons for "选课" (Select Course), "学习" (Study), "发现" (Discover), and "我" (Me).

学而思双师课堂(好未来) 线上讲课老师 + 线下辅导老师/教室



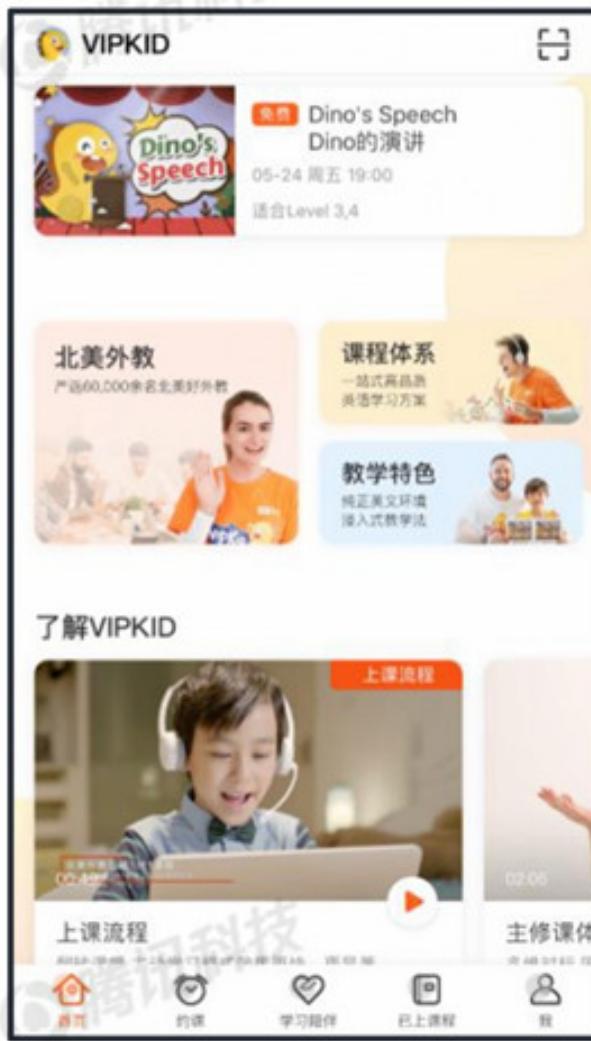
作业帮 K-12 解题帮助(拍照搜题) + 在线直播团课

The screenshot shows a math problem from the Zheye app. At the top, there are navigation numbers 1, 2, 3, 4, 5, and an ellipsis. The problem itself is a geometric diagram of a triangle ABC with an altitude AE from vertex A to side BC, meeting it at point E. A line segment BD is drawn from vertex B perpendicular to AE at point F, meeting it at point D. The text of the problem asks: "如图, 已知△ABC是等边三角形, 延长AC到D, 以BD为一边作等边△BDE, 连接AE. 求证: AD=AE=AB." Below the diagram, there is a section titled "题目解答" (Solution to the question) with a small icon. Further down, there is a section titled "解答" (Answer) with a numbered problem statement: "11. 证明: ∵ 等". Below this is a detailed mathematical proof in Chinese, which is partially cut off. At the bottom, there are buttons for "加入错题本" (Add to错题本), "在线问答" (Online Q&A), "问学霸" (Ask学霸), and "拍题" (Take photo of the question).

中国在线儿童教育 1对1外教英语 + 各种编程课程...

VIPKid

1对1 & 小班外教英语



核桃编程 编程录播课



编程猫

在线编程直播课



政务服务数字化

微信 + 支付宝政务服务触达5亿用户

粤省事 微信小程序

1000万+实名认证用户 (广东省)
500+ 政务服务项目



支付宝 政务服务

~5亿累计用户
300+ 覆盖城市

服务	覆盖城市数量	之前平均等待时间	之后平均等待时间
水电煤缴费	300+	~1小时	~1分钟
社保服务	240+	~1小时	~1分钟
交通违章	200+	~30分钟	~1分钟
医院挂号	250+	--	缩短50%

资料来源: 腾讯(2019年4月), 蚂蚁金服。