THINK AGAIN:

TECH AND MEDIA OUTLOOK 2016

WSJD Live Conference

October 20, 2015

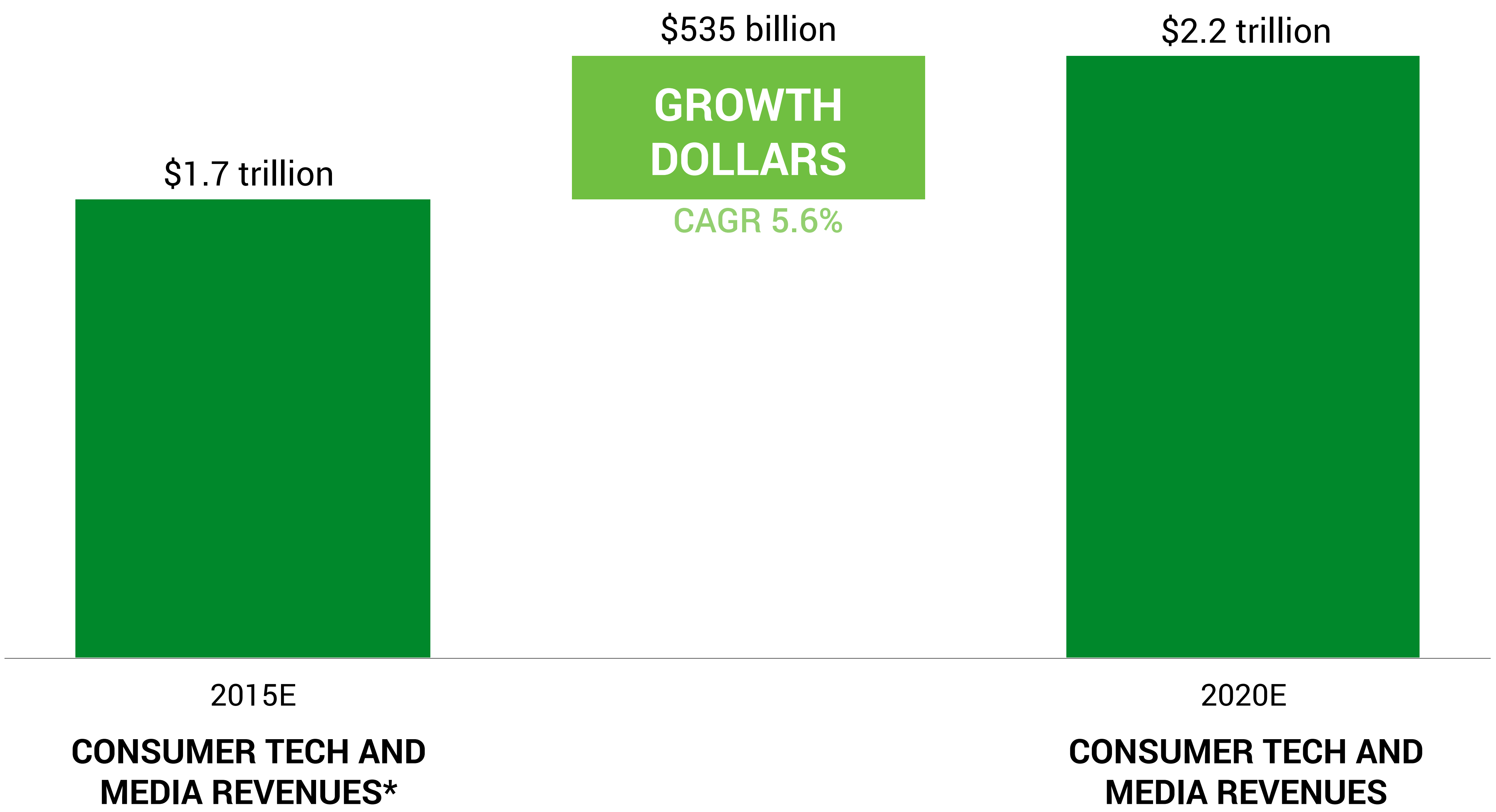
www.activate.com

activate

WSJ.D LIVE

Over the next five years, the consumer tech and media industry will grow by **over $500 Billion**

Consumer Tech and Media Business Growth, 2015E-2020E



Sources: PwC, IFPI, eMarketer, IBIS, SuperData, NewZoo, IBIS, Activate analysis. CAGR based on values prior to rounding.
*Consumer Tech and Media Revenues includes Radio, Recorded Music, Magazine Publishing, Newspaper Publishing, Video Games, Filmed Entertainment, Book Publishing, TV Subs and Licensee Fees, Internet Access, Digital advertising & Traditional advertising on these platforms

The 9 most important insights for tech and media in 2016

THE AVERAGE AMERICAN SPENDS MORE TIME ON TECH & MEDIA THAN WORK OR SLEEP

MESSAGING WILL BLOW PAST SOCIAL NETWORKS AS THE DOMINANT MEDIA ACTIVITY

THE NEXT BIG WINNERS IN STREAMING AUDIO ARE ALREADY (QUIETLY) HERE

THE LONG-AWAITED CORD CUTTING MOMENT IS STILL FAR OFF

THERE IS A "CABLE KILLER" COMING, BUT IT WON'T LOOK LIKE YOU EXPECT

E-SPORTS & WAGERING WILL CHANGE THE GAME IN GAMING

GOOD LUCK GETTING RICH IN THE APP STORE!

THESE COMPANIES ARE GRABBING ALL THE MONEY IN CONSUMER TECH & MEDIA

ONE SIMPLE WAY TO PREDICT WHAT TECH & MEDIA PLAYERS WILL DO NEXT TO COMPETE

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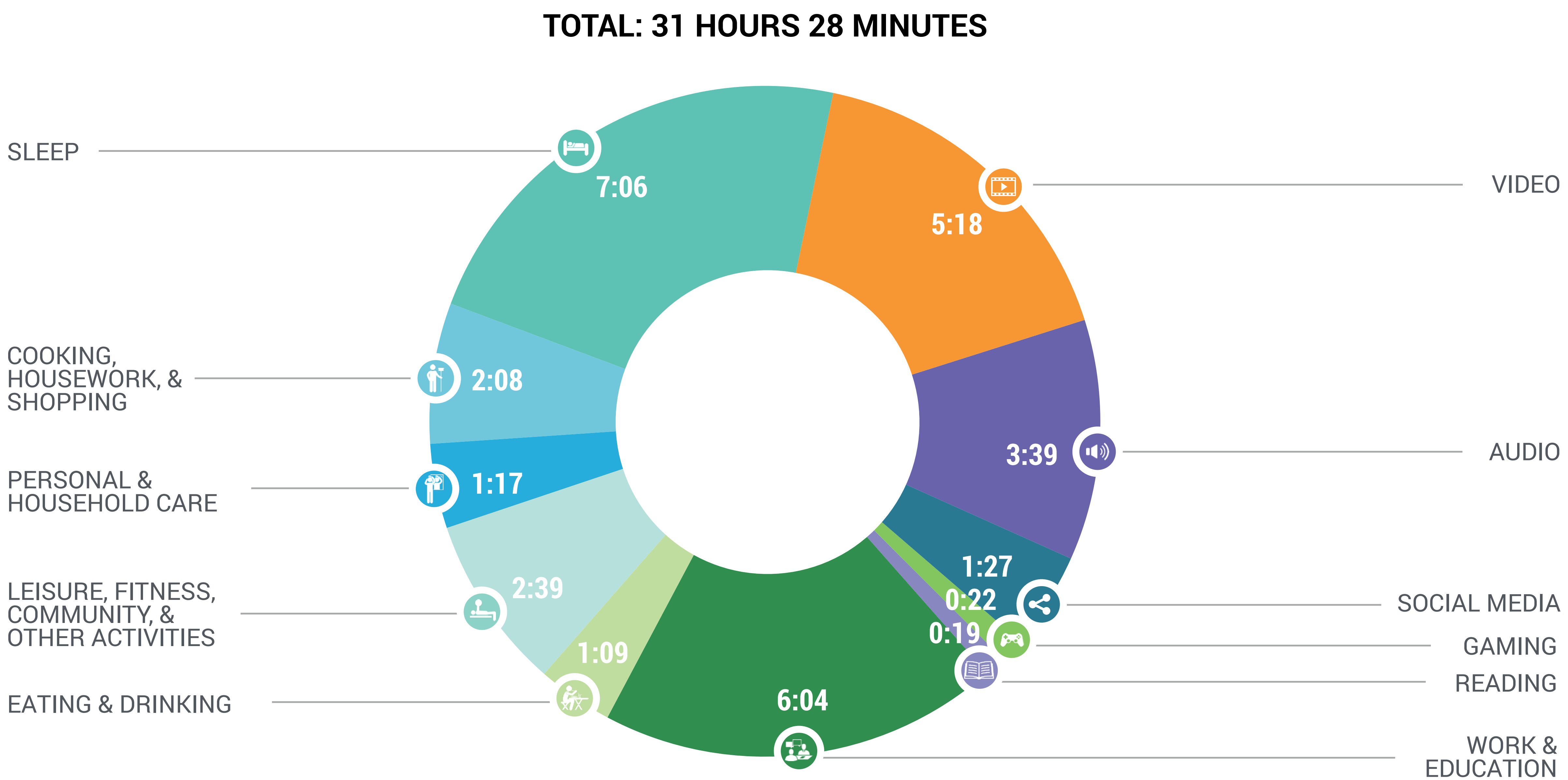
CAPTURING ATTENTION IS NOT A ZERO SUM GAME

WE ANALYZED EVERY MINUTE IN AN AVERAGE AMERICAN ADULT'S DAY

Attention is multi-tasked: the average American has **over 31 hours of activity** in a day

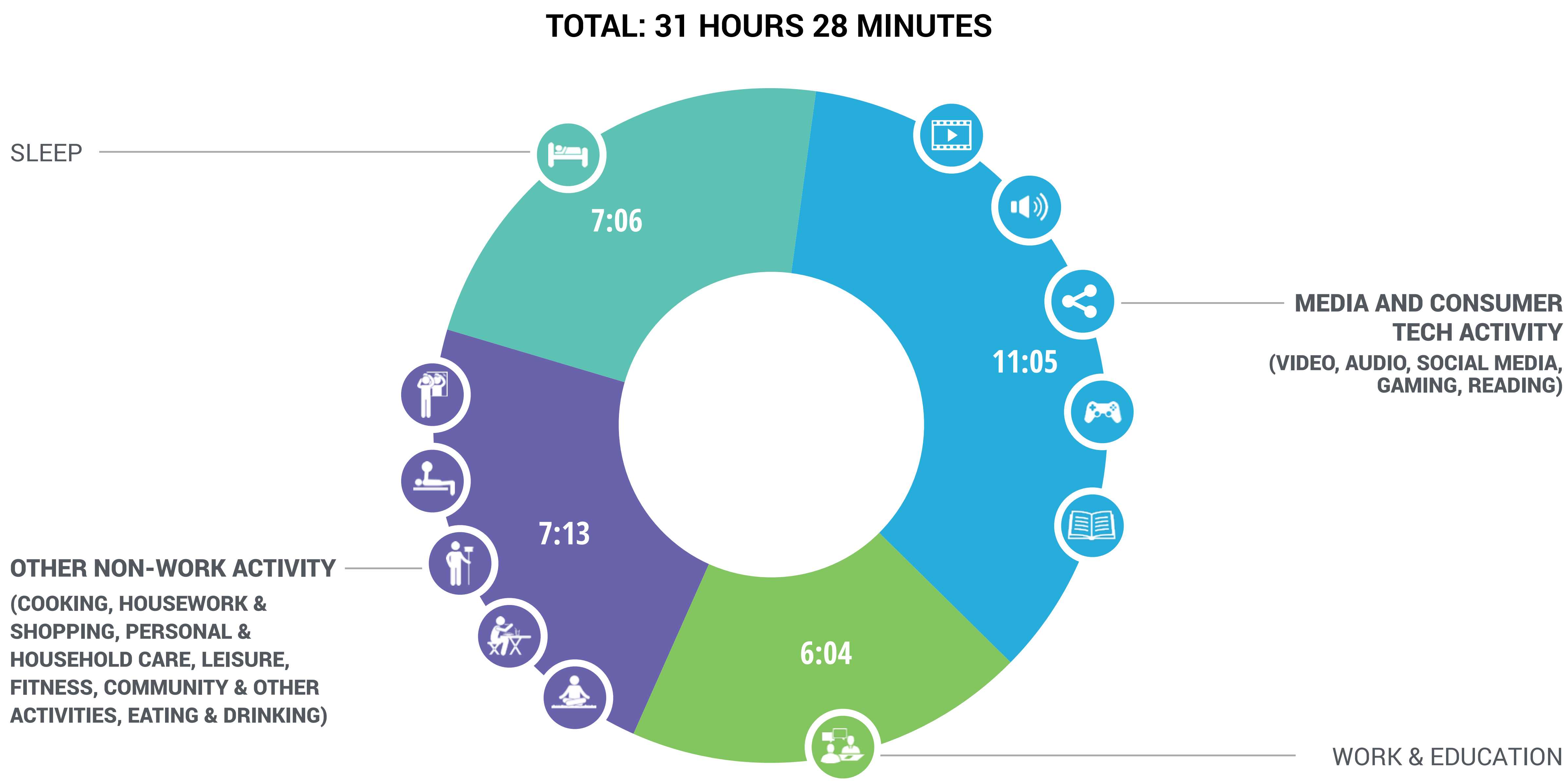
Average Employed Adult Daily Behavior, U.S., 2014, Hours : Minutes



Sources: Bureau of Labor Statistics, The Telegraph, Edison Research, We Are Social, eMarketer, Nielsen, National Sleep Foundation, Deloitte, SNL Kagan, Sandvine, Ipsos, comScore, Global Web Index, OECD, Activate analysis. Behaviors averaged over 7 days. Related travel time is included within timing reported for daily activities.

The total tech and media attention up for grabs is enormous: more than half the waking day is spent on tech and media

Average Employed Adult Daily Behavior, U.S., 2014, Hours : Minutes



Sources: Bureau of Labor Statistics, The Telegraph, Edison Research, We Are Social, eMarketer, Nielsen, National Sleep Foundation, Deloitte, SNL Kagan, Sandvine, Ipsos, comScore, Global Web Index, OECD, Activate analysis. Behaviors averaged over 7 days. Related travel time is included within timing reported for daily activities.

All of this attention is split up across relatively few apps, sites and channels

Actual Consumption for Apps, Websites, TV Channels, U.S., 2014

APP SHARE OF TIME SPENT

27
apps used per month

79% of time spent on

5

APPS

WEBSITE SHARE OF TIME SPENT

96
websites visited per month

44% of time spent on

5

WEBSITES

TV CHANNEL CONSUMPTION

194
average available channels

100% of time spent on

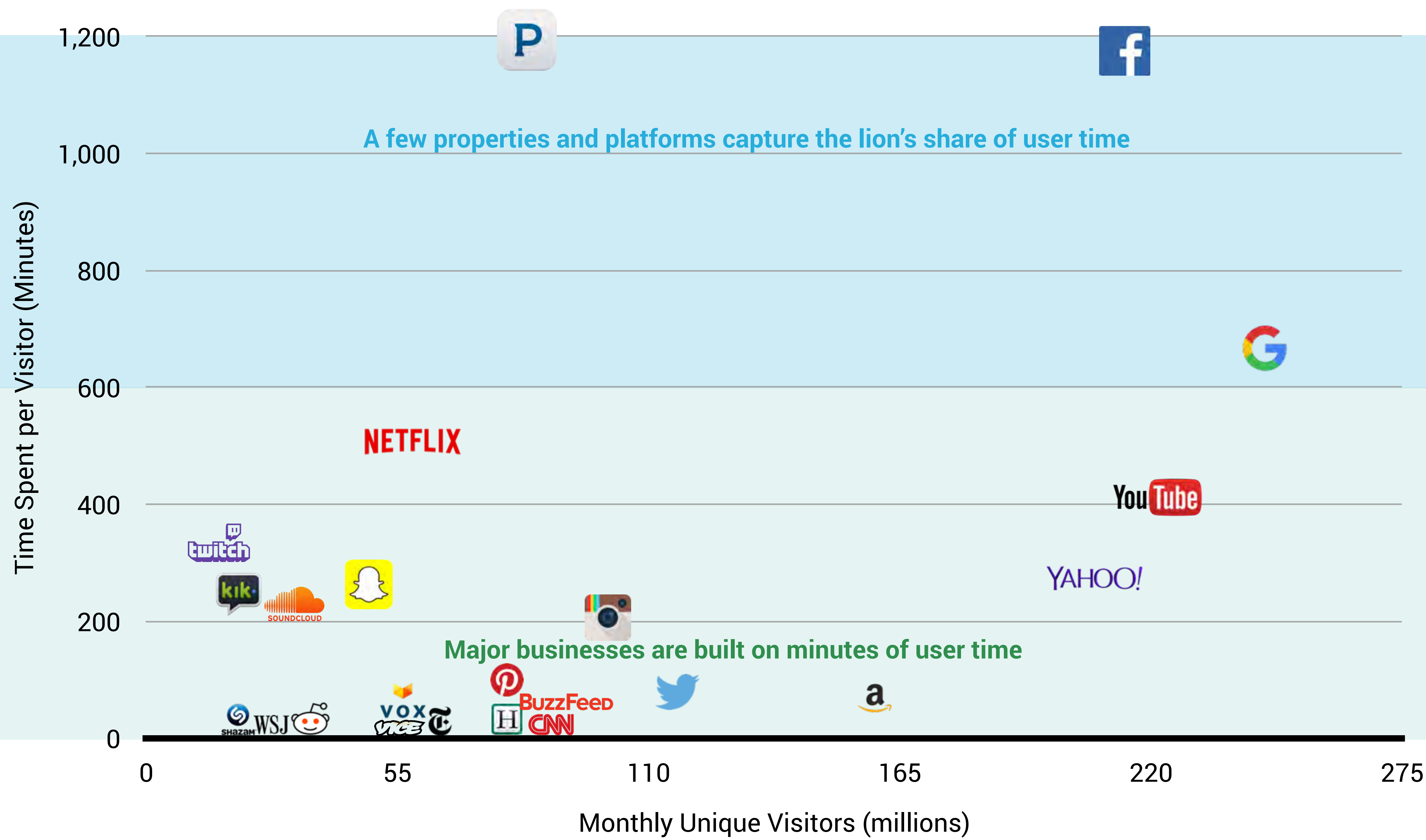
18

CHANNELS

Sources: Nielsen, Comscore, Ars Technica, TechCrunch, Internetlivestats, Digitalsmiths, Activate analysis. Averages across all users with access

We can find growth opportunities in people's online behavior: how many users visit the top websites and apps, and for how long?

MUVs vs. Minutes per Visitor per Month, U.S., January - September 2015



Sources: comScore, Activate analysis

A billion dollar business can be built by capturing less than a minute of an average user's daily attention

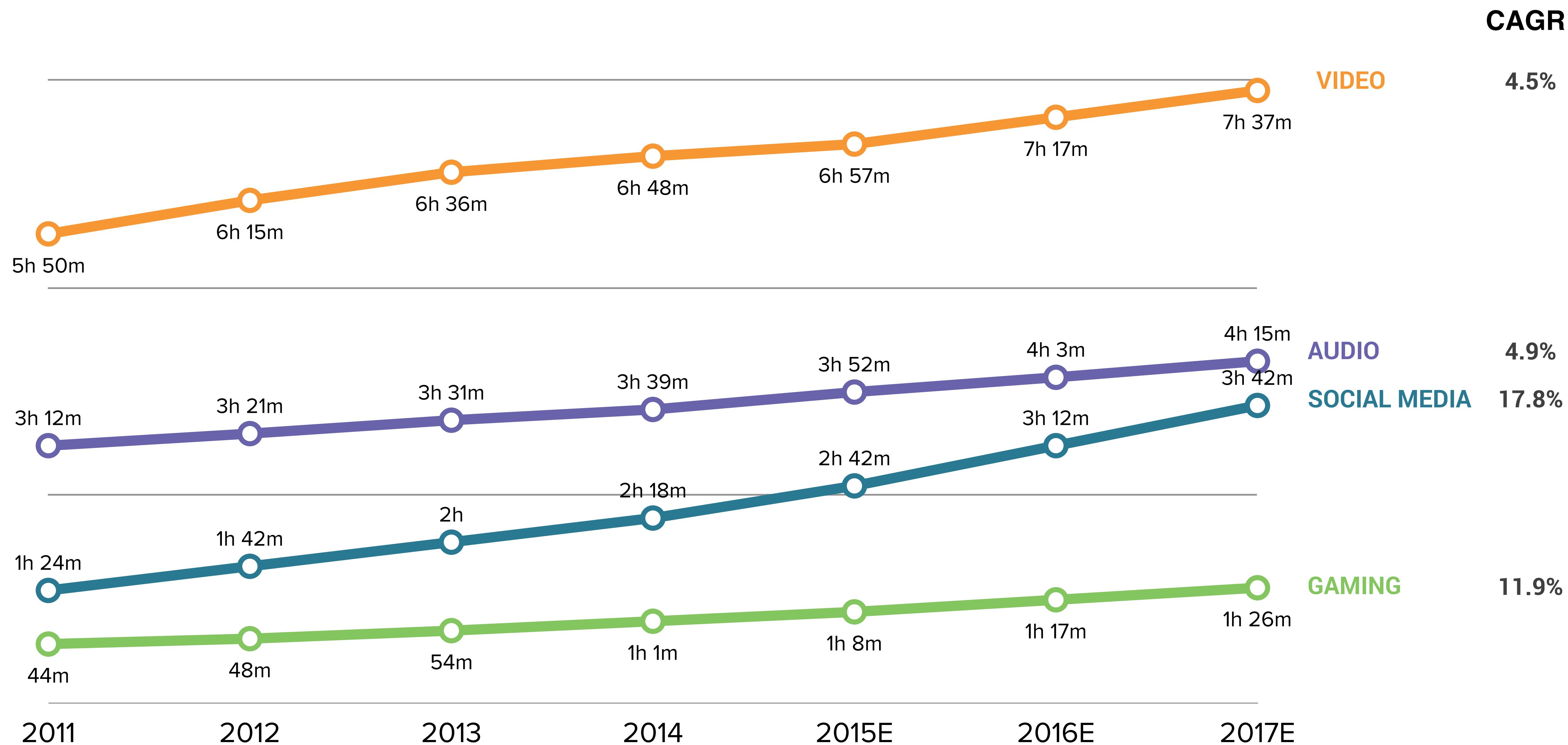
Average Time per User (MUV) per Day, U.S., Valuation (in billions)

Company	Average Time per User per Day	Valuation
HelloFresh	9 SECONDS	$2.9 B
VICE	16 SECONDS	$2.5 B
ZocDoc	10 SECONDS	$1.8 B
BuzzFeed	36 SECONDS	$1.5 B
Shazam	19 SECONDS	$1.0 B
Vox Media	17 SECONDS	$1.0 B

Sources: CB Insights, ComScore, Activate analysis. Average Time per User per Day based data for months August 2014-2015

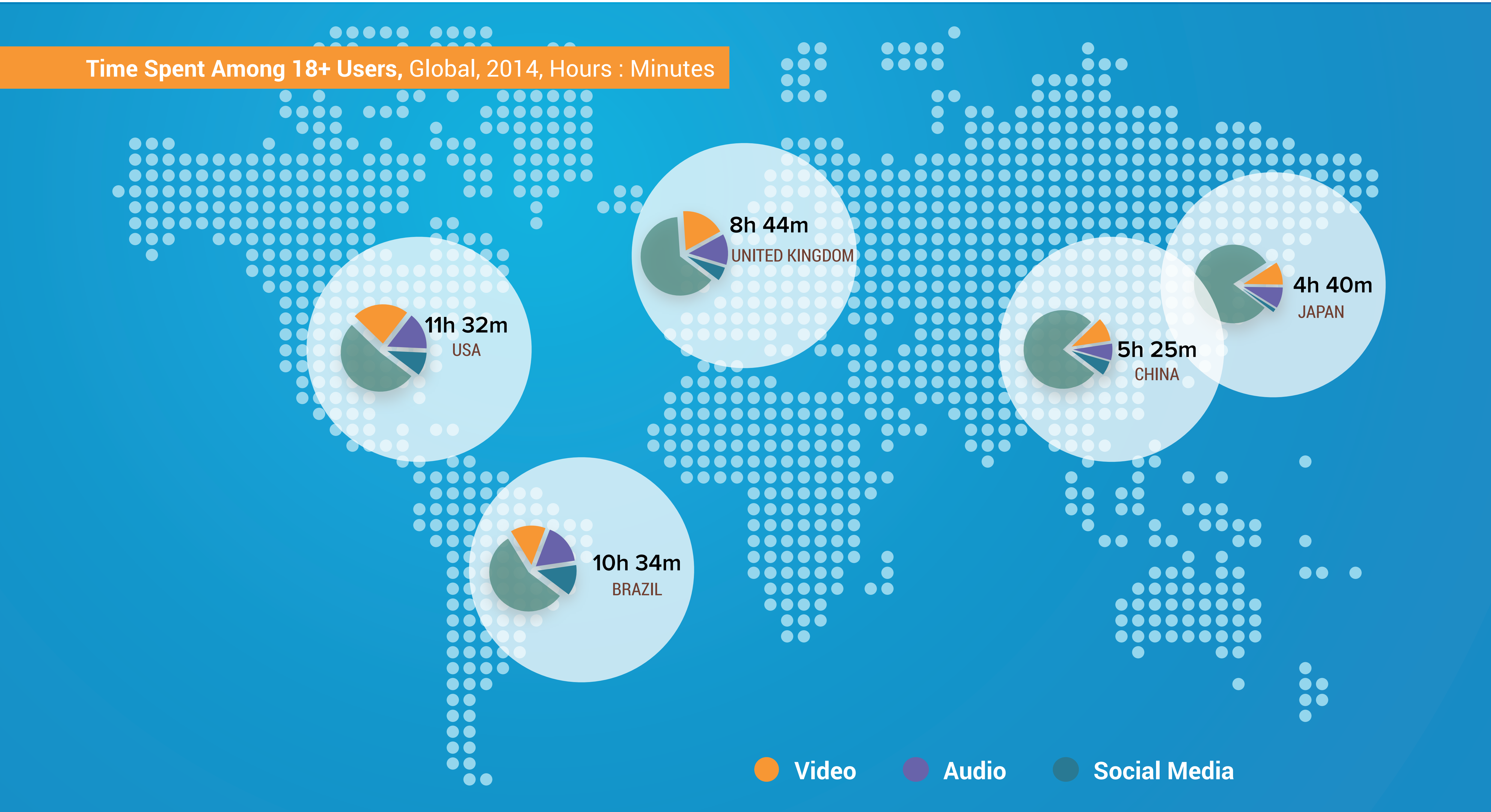
Time spent on major digital activities like video, audio, social media and gaming will continue to increase

Time Spent Among 18+ Users, U.S., 2011 - 2017E, Hours : Minutes



Sources: Edison, We Are Social, eMarketer, Nielsen, Deloitte, SNL Kagan, Sandvine, Ipsos, comScore, Global Web Index, Pew Research Center, Flurry Insights, Informate, NetMarketShare, Statcounter, Activate analysis. Time spent may be double counted (e.g. YouTube for both video and audio).

These behaviors dominate people's attention around the world



Sources: Edison, eMarketer, Nielsen, Sandvine, US Media Consulting, Cisco, Experientia, Media UK, Global Web Index, Secom, Ofcom, GroupM, Activate analysis

Multitasking will continue to grow as new products and experiences expand the number of multitasking moments

Google Self-Driving Car

Microsoft HoloLens

Amazon Echo

Disney Playmation

Sources: Google, Microsoft, Aldebaran, Disney / New York Times

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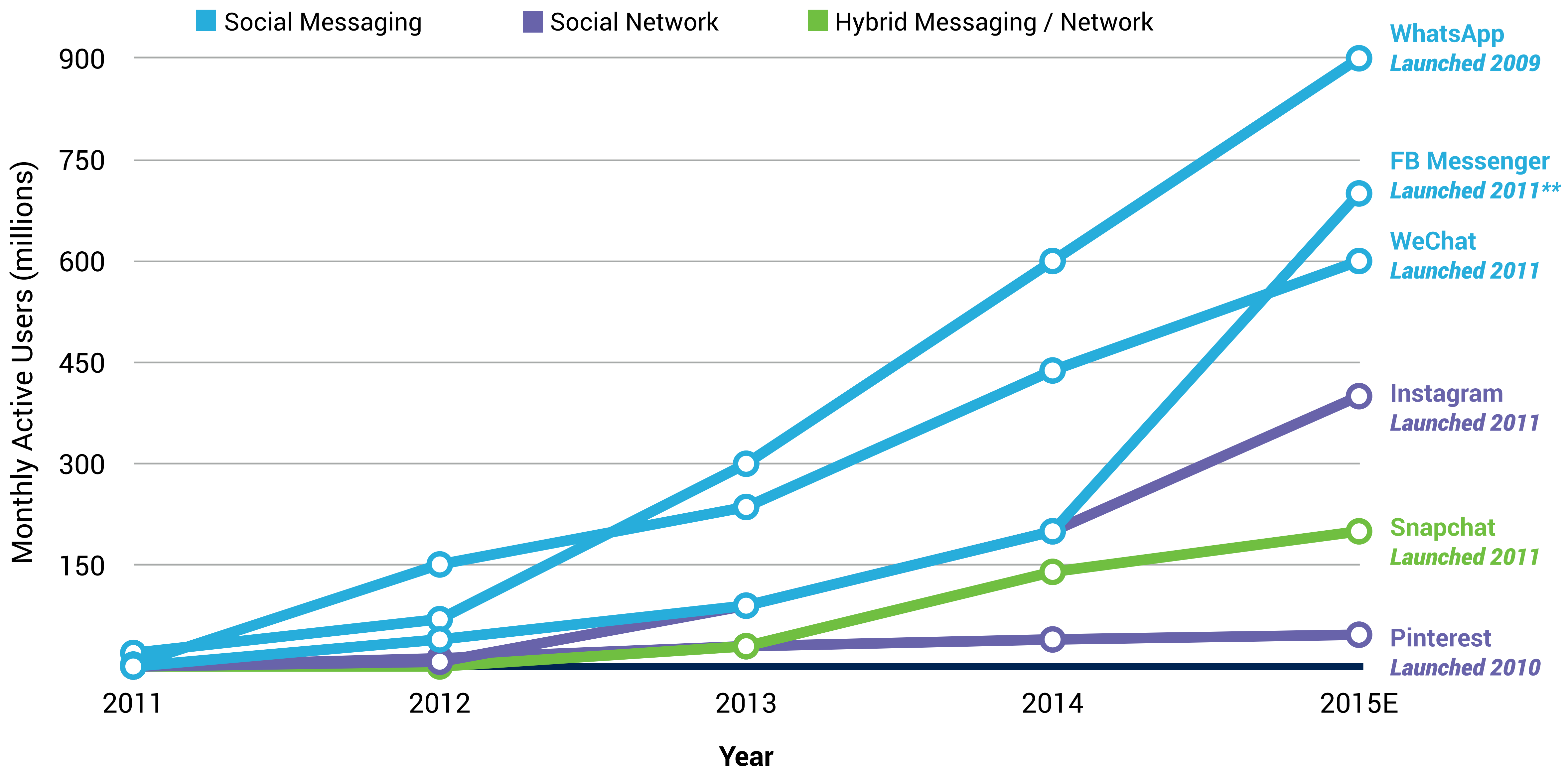
Messaging has been the **fastest-growing online behavior** within the social landscape over the past five years, passing social networks

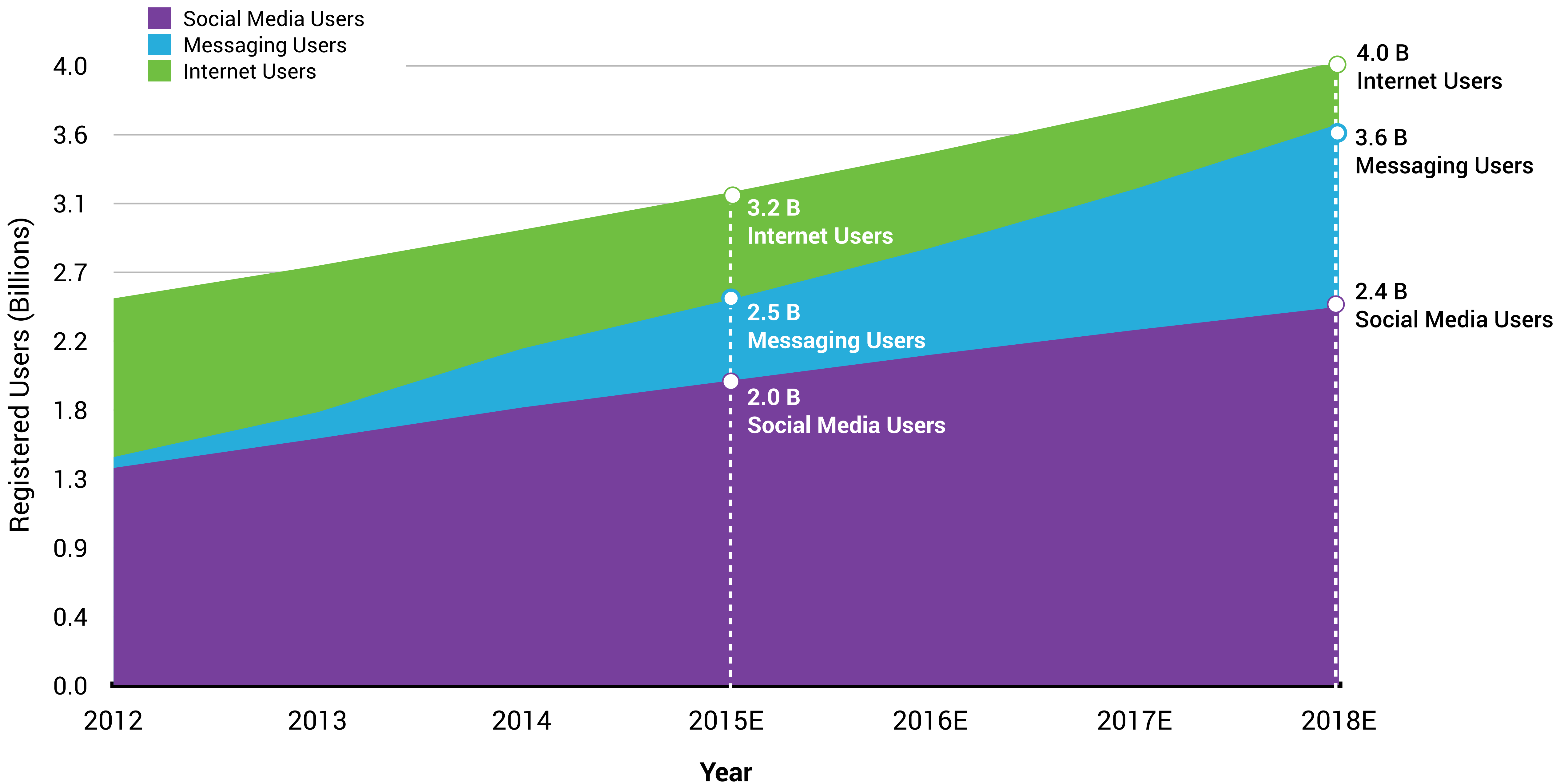
Growth of Messaging Platforms vs. Network Platforms, Monthly Active Users (MAUs), 2011 - 2015E*



*Messaging defined as communicating primarily in real time with other contacts; social defined as broadcast sharing of status updates, images, videos, or other content. All data measured from Q2/Q3 of each year.
**Became standalone app in 2014
Sources: Business Insider, Fortune, Mashable, Instagram, AppAnnie, AdWeek, Quartz, Yahoo Finance, Experian, TechCrunch, Forbes, Tech in Asia, eMarketer, Compete, Activate analysis

We forecast that messaging will add **1.1 Billion new users** by 2018

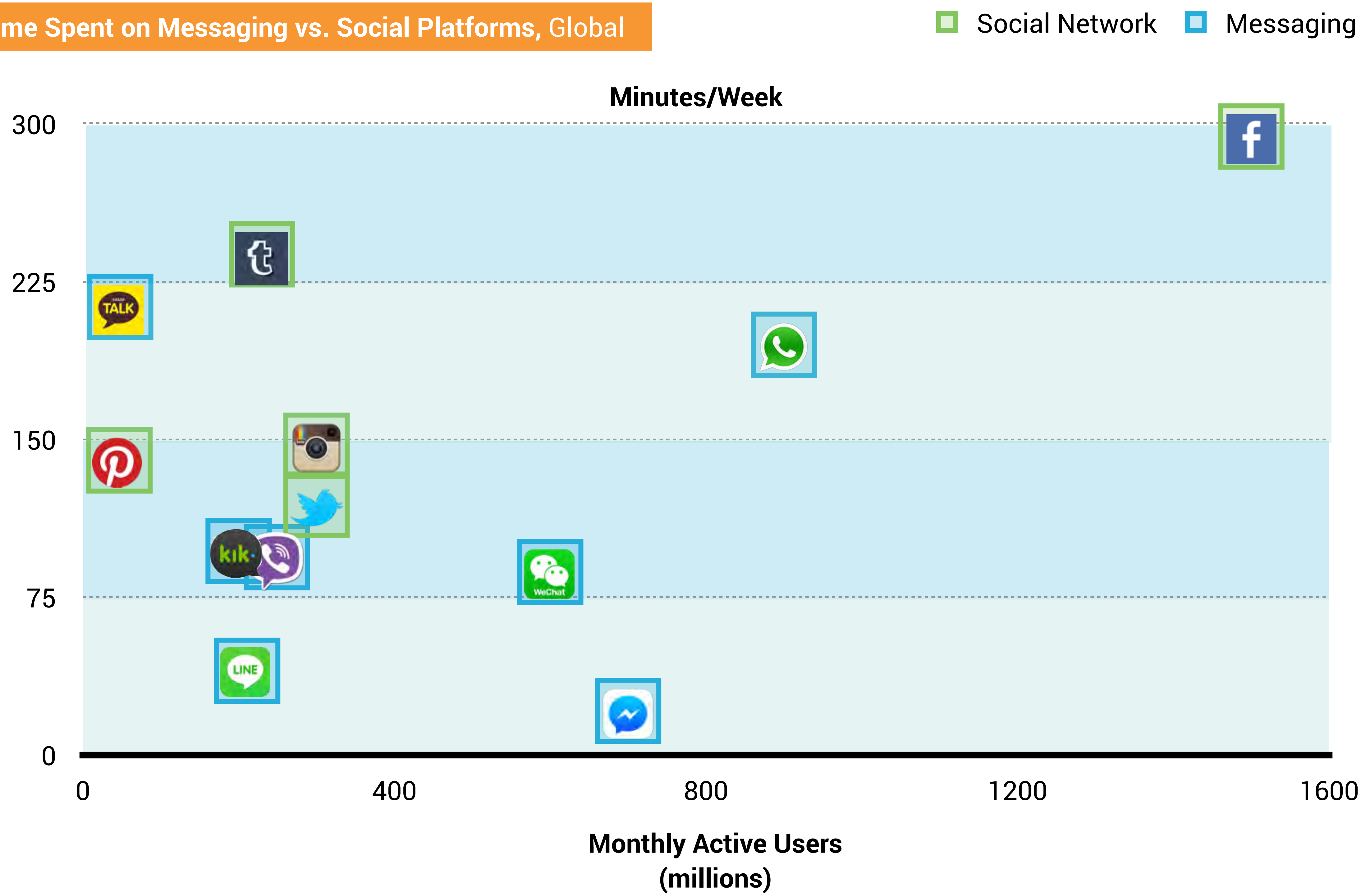
Users of Messaging, Social Media, and Internet, Global, 2012 - 2018E



Sources: Activate forecast, GlobalWebIndex, eMarketer, ITO, Activate analysis. Note: Number of monthly active users is lower than number of registered users

Some messaging platforms already rival social networks for time spent by users

Time Spent on Messaging vs. Social Platforms, Global



Sources: AppAnnie, AdWeek, Quartz, Yahoo Finance, Experian, TechCrunch, Forbes, Activate analysis

Clear leaders are emerging in the messaging landscape; Facebook Messenger and WhatsApp are global, others dominate locally

Name	Monthly Active Users (in millions)		Geography of Dominant User Base
WhatsApp	900		Global
Facebook	700		Global
WeChat	600		China
QQ Mobile	~600	*	China
Gchat	>425	*	USA
iMessage	~400	**	USA
Viber	249		EMEA
LINE	211		Japan
Snapchat	200		USA & EMEA
Kik	200		EMEA
Telegram	85		EMEA
Tango	80		APAC
KakaoTalk	48		South Korea
Hike	35		India
Zalo	~18	*	Vietnam
Path Talk	10		USA
FireChat	< 5	*	EMEA & APAC
YikYak	4		USA
SOMA	< 2		Saudi Arabia
Jott	< 1		USA
Nimbuzz	N/A		India
Microsoft Send	N/A		USA
Vurb	N/A		USA

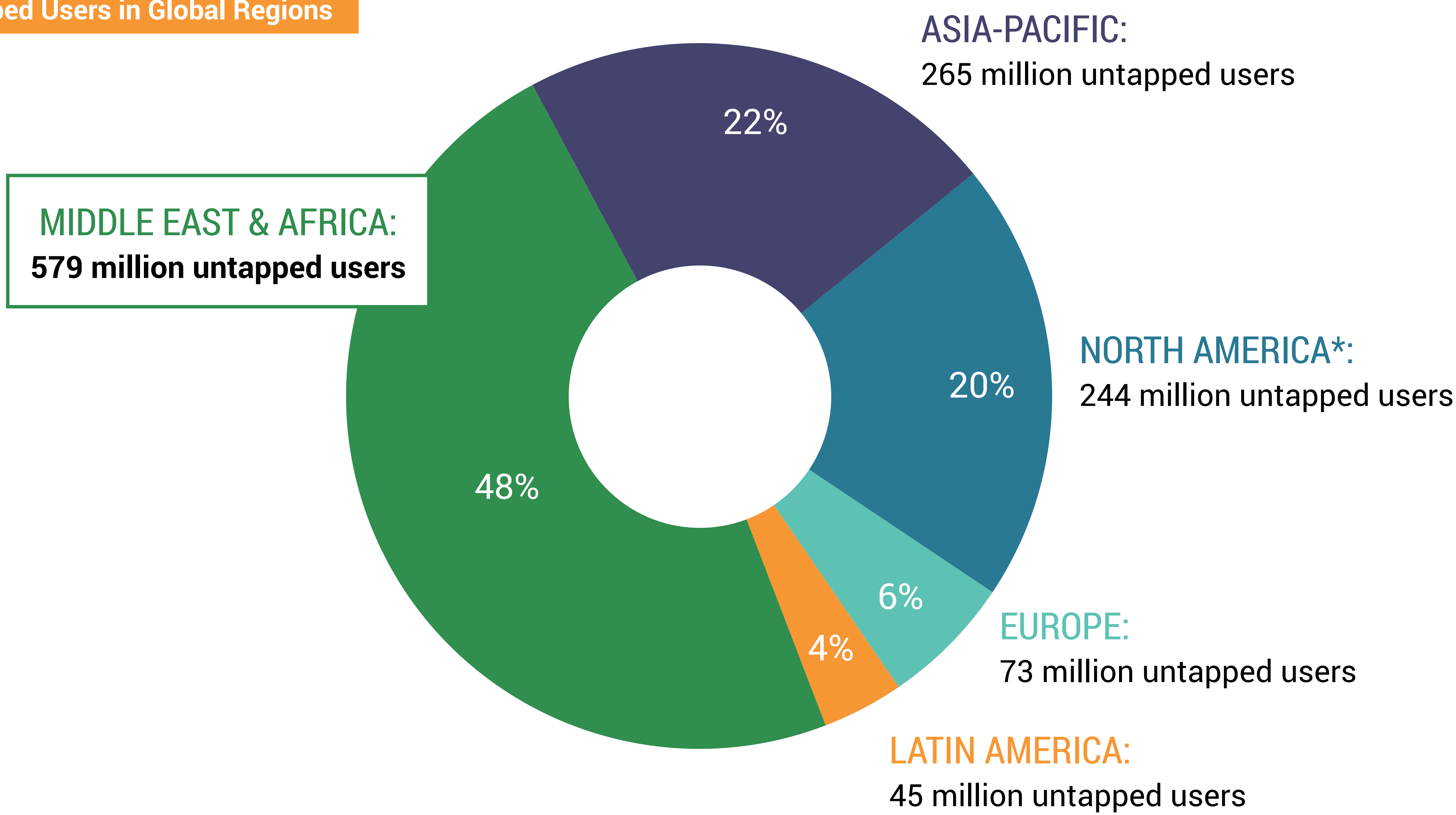
While founded in the U.S., both **WhatsApp** and **Facebook Messenger** have attracted **global audiences**

The **third largest messaging platform is Chinese** — WeChat (and its predecessor QQ Mobile) owned by Tencent

*Indicates estimates; ** Estimate based on number of iPhones sold
Sources: AppAnnie, AdWeek, Quartz, Yahoo Finance, Experian, TechCrunch, Forbes, Tech in Asia, VentureBeat, Kakao, LINE, Viber, Activate analysis

Almost half the growth opportunity for messaging players is in the Middle East & Africa; North America presents a significant opportunity if messengers can displace SMS

Untapped Users in Global Regions



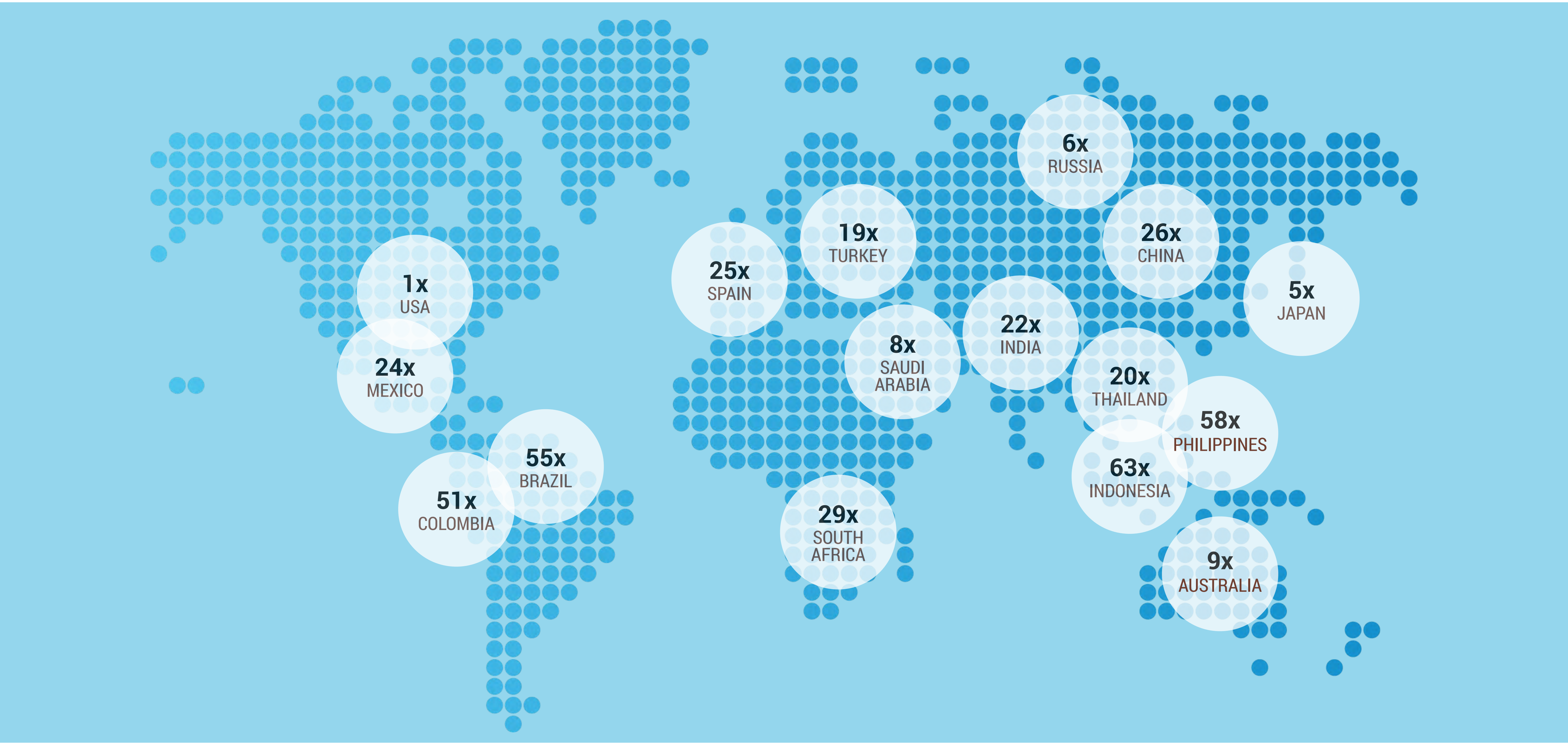
* Includes Mexico

Sources: LINE Payment map, Twilio, U.S. Census Bureau, Forbes, Gallup, Colombia Reports, nations.org, Activate analysis. Based on current and potential penetration of smartphones and messaging

The messaging boom is about price—sending an SMS is up to 63x more expensive outside the U.S., while messaging apps are flat-fee or free

Comparative Cost of Sending SMS

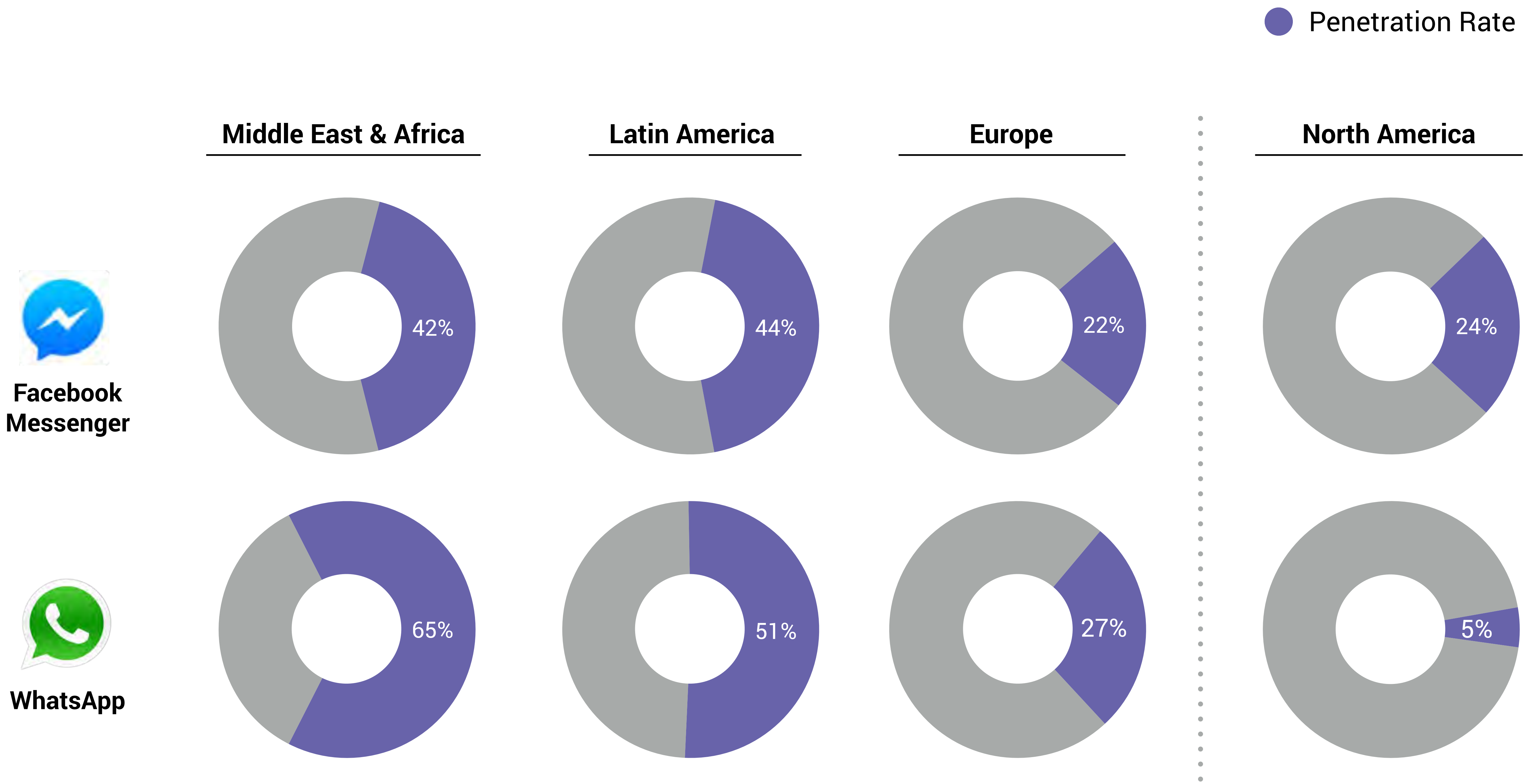
Indexed Against United States SMS Costs
Normalized for Median Household Income & Purchasing Power Parity



Sources: Gallup, Twilio, U.S. Census Bureau, Forbes, Colombia Reports, World Bank, Activate analysis. Median household income accounts for purchasing power parity, and proportional cost of sending SMS is also based on relative percentage of median household income.

Facebook's WhatsApp and Messenger are the only global players, leaving them in the best position to capitalize on messaging

Messaging App Regional Share of Smartphone Owners



Sources: GlobalWebIndex, Tech in Asia, Activate analysis. Facebook Messenger penetration Q1 2015, WhatsApp Q4 2014

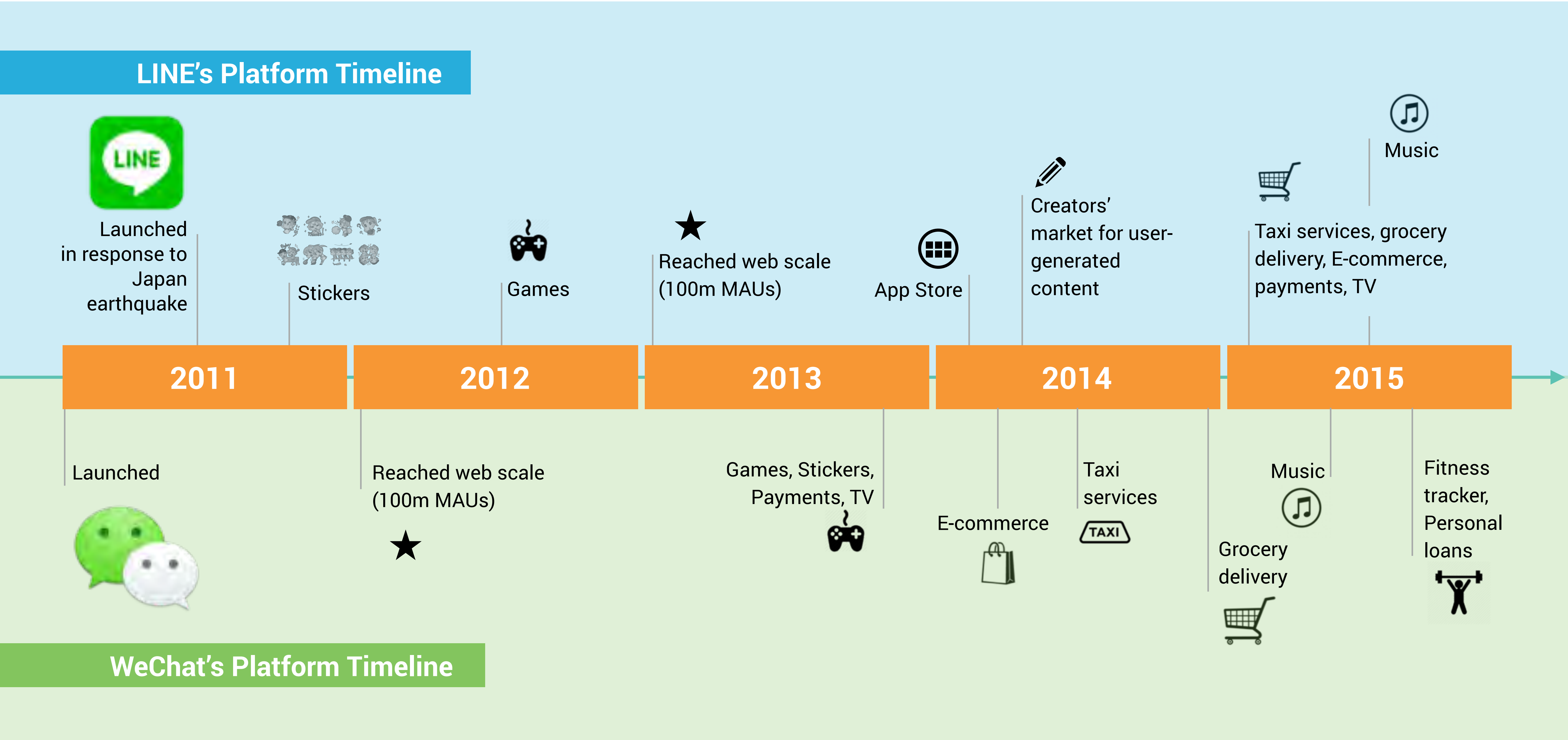
In Asia-Pacific, local messaging apps dominate in the largest countries, but in Southeast Asia global players are competing

Penetration by Country, Local vs. Global Messengers

	Country	Dominant Local (APAC) App	Facebook Messenger	WhatsApp
Major local players	China	**0.65**	0.04	0.03
	Japan	**0.6**	0.02	0
	South Korea	**0.43**	0.18	0.02
Southeast Asia: Competition from global players	Taiwan	**0.48**	0.34	0.1
	Thailand	**0.54**	0.46	0.12
	Vietnam	0.4	**0.5**	0.07
	Philippines	0.09	**0.52**	0.1
	Malaysia	0.31	0.49	**0.64**
	Indonesia	0.31	0.4	**0.45**

Sources: GlobalWebIndex, Tech in Asia, Activate analysis. Regional penetration rates as of Q1 2015, measured against adults in the region who are smartphone users (Japan) or mobile Internet users (all other)

As major Asian messaging platforms reach scale, they have launched new first-party and third-party services as apps on top of messaging, capturing significant messaging revenues



Sources: AdWeek, Quartz, Yahoo Finance, Activate analysis

Apps built on top of messaging enable users to solve broad problems; messaging becomes a hub for consuming content, playing games, and conducting transactions

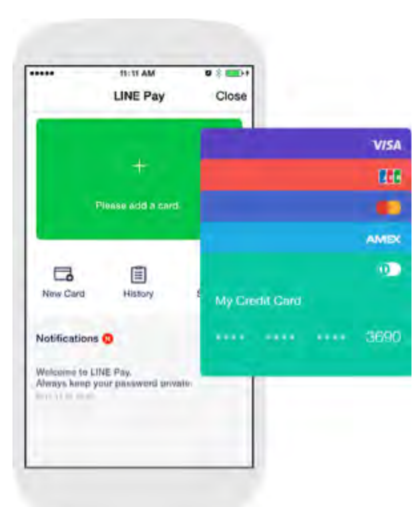
LINE Example

LINE Taxi

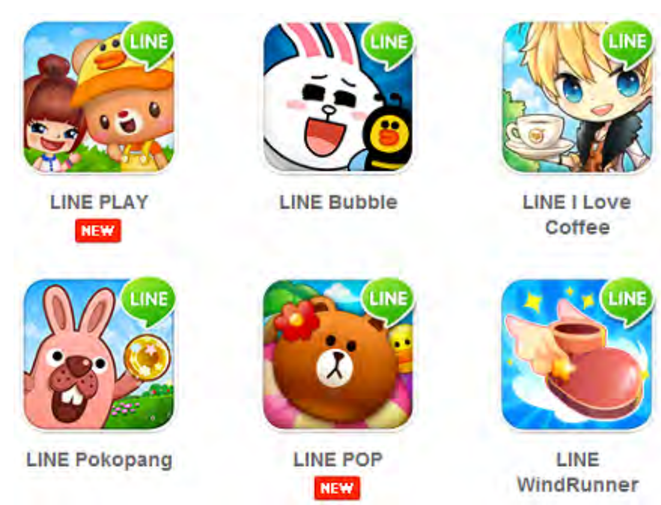
LINE Music

LINE TV

LINE Payments



LINE Games



Sources: LINE.com

Facebook messenger has been focusing on building scale and is now starting to add platform layers and its first app features

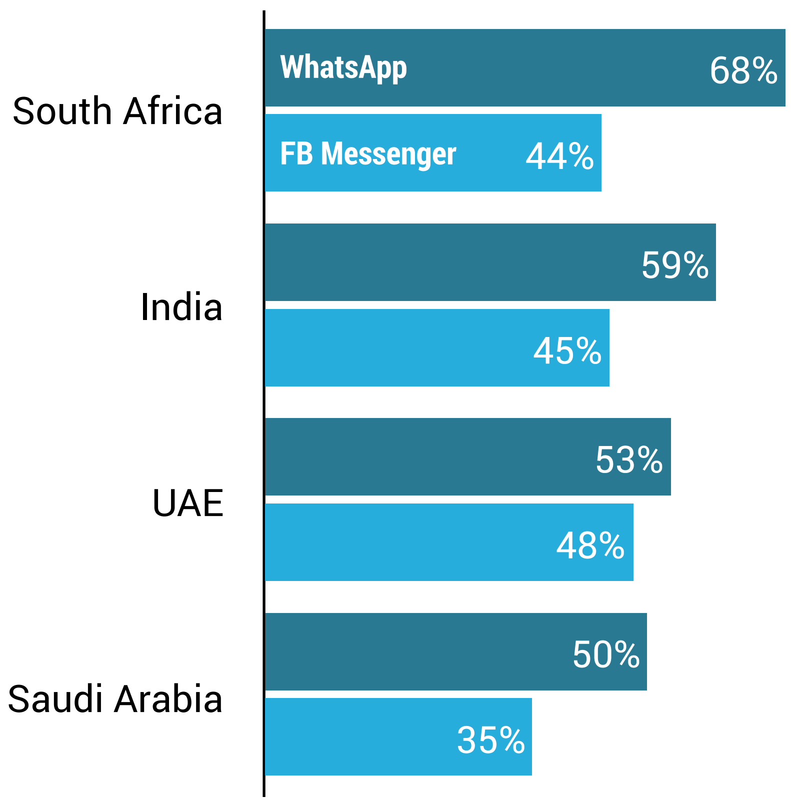
facebook.

WHATSAPP ACQUISITION

Access to High Growth Markets

February 2014

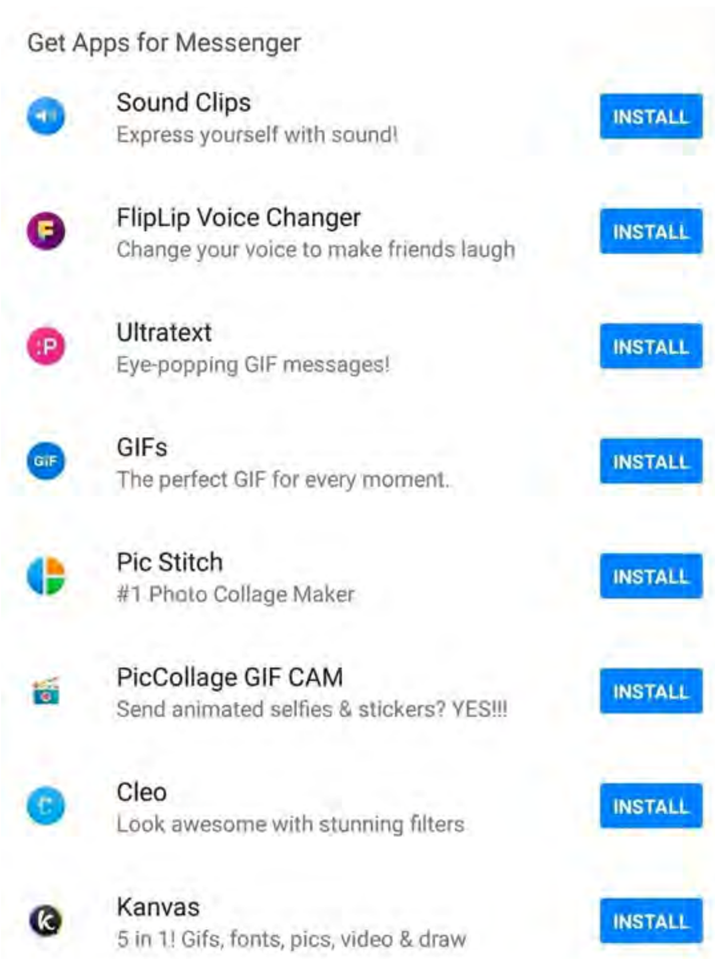
Penetration Comparison
in Key Growth Markets



MESSENGER APP STORE

Apps for Audio, Photos, GIFs

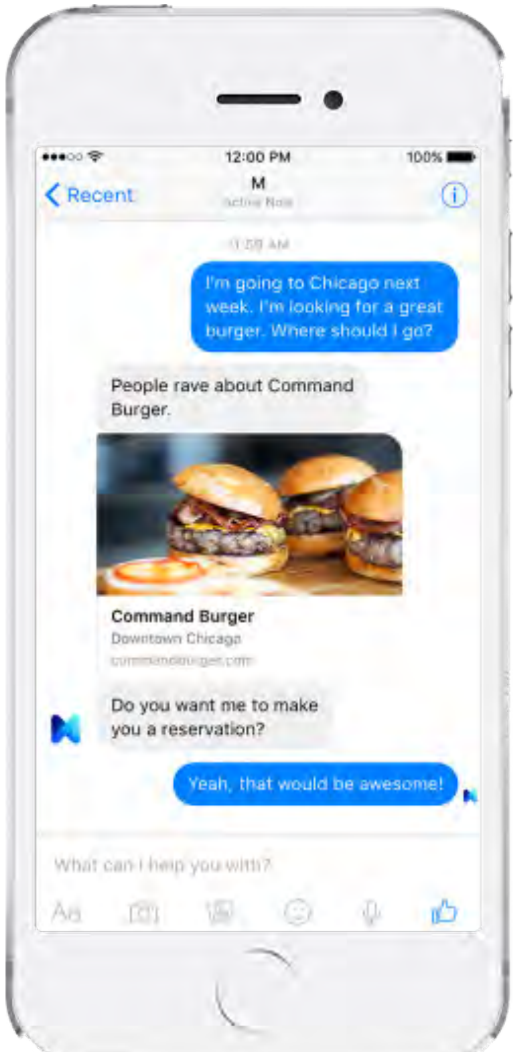
August 2015



VIRTUAL ASSISTANT "M"

Artificial Intelligence

September 2015



Sources: GlobalWebIndex, Facebook Messenger App, facebook.com

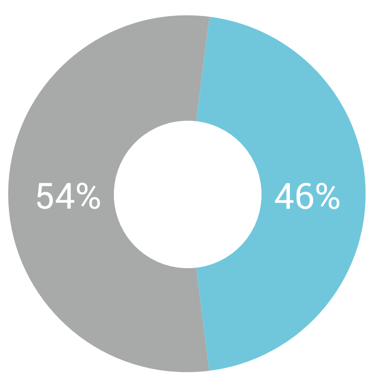
Apple's Messages has the potential to gain significant market share, and Apple's platform control could support smarter apps

2015 YTD MARKET SHARE

Pre-Installed User Base, High Penetration in USA

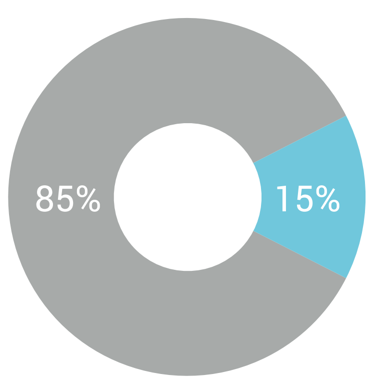
Unpenetrated % Penetrated %

U.S.



94 million

Non-U.S.

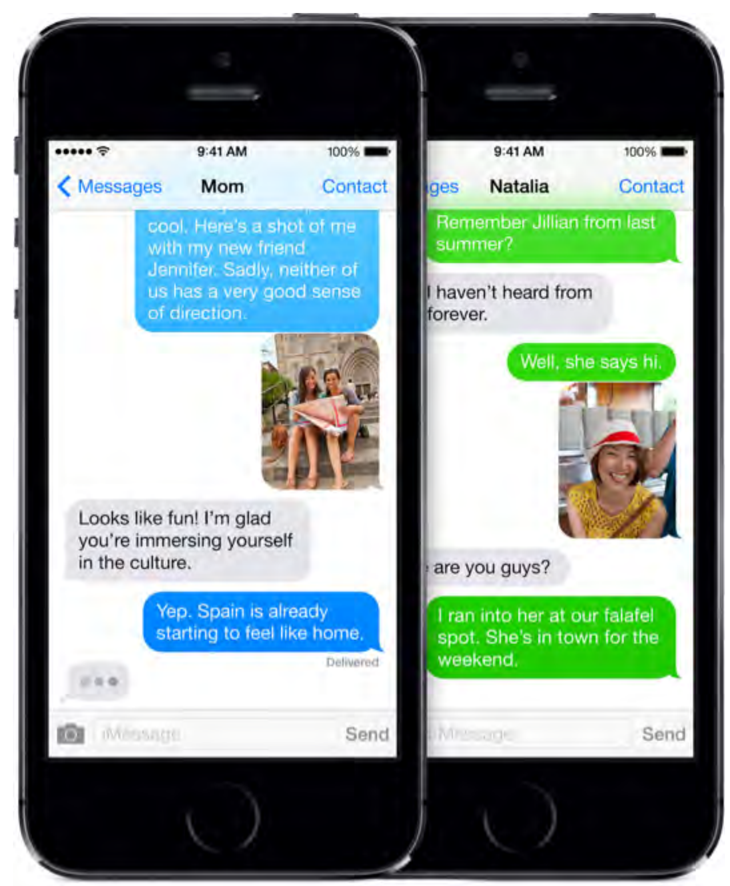


261 million

SMS INTEGRATION

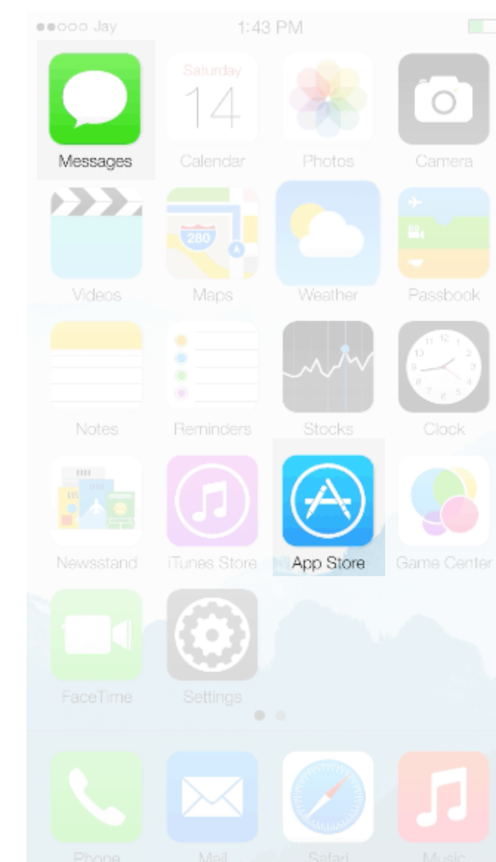
One Interface for Messages and SMS

iMessage SMS



iOS APP STORE

Apps Remain Separate from Messages

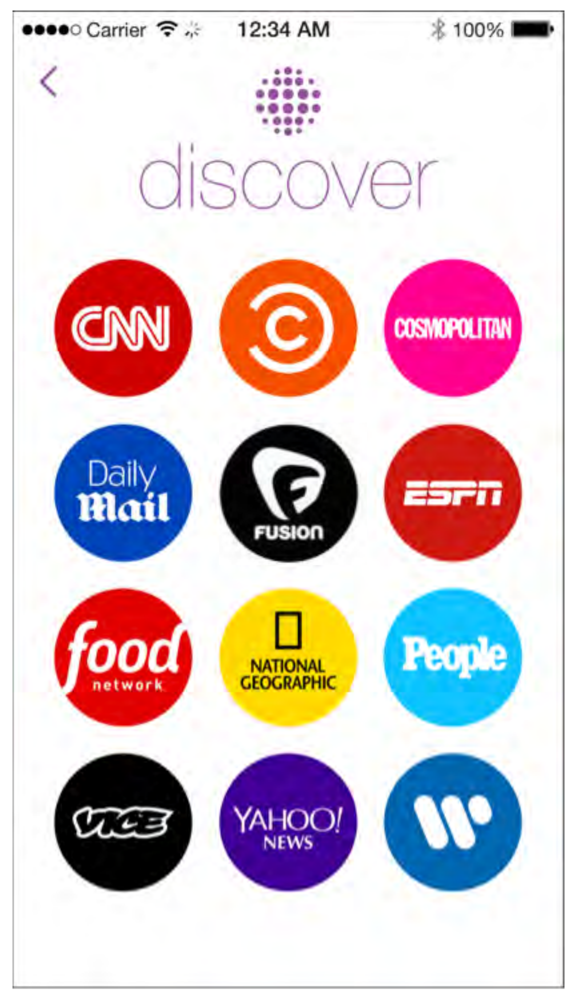


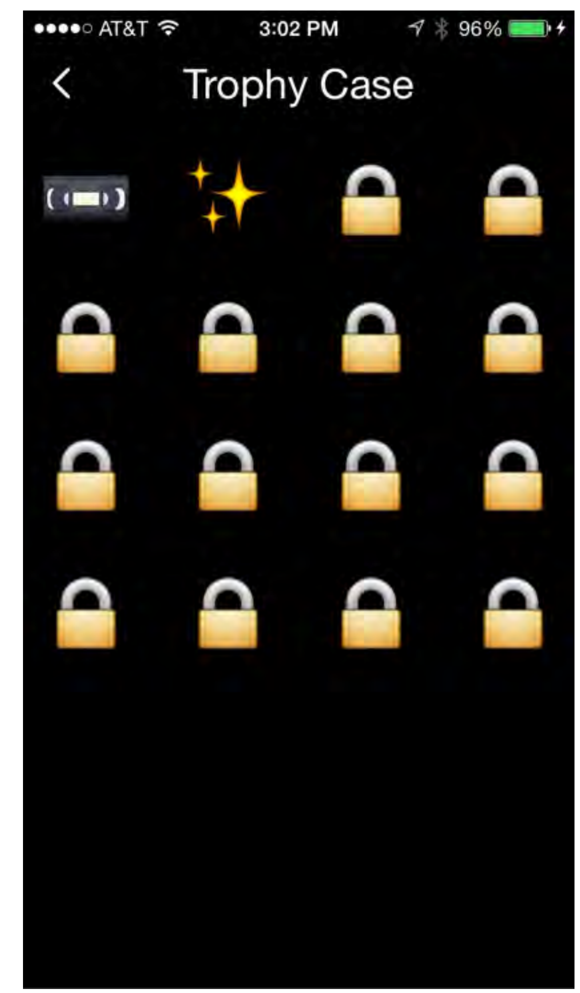
Sources: Pew Research, Consumer Intelligence Research Partners, Apple, Activate analysis

While Snapchat is growing quickly, the company has not yet developed a consistent approach to expanding its platform while building a revenue model

snapchat

SNAPCASH **Payments Service** November 2014	**DISCOVER** **Paid Content Distribution** January 2015	**TROPHY CASE** **Gamification of User Activity** September 2015



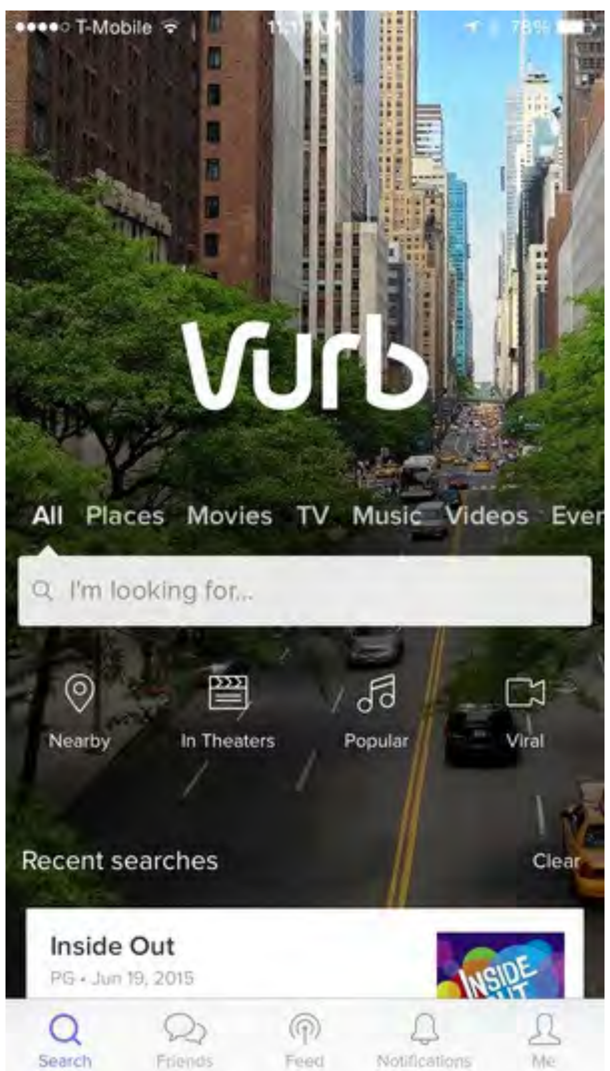


Sources: snapchat.com, Re/Code, The Information, Activate analysis

New entrant Vurb pulls search results from across third-party apps and integrates with messaging, minimizing the need for app switching

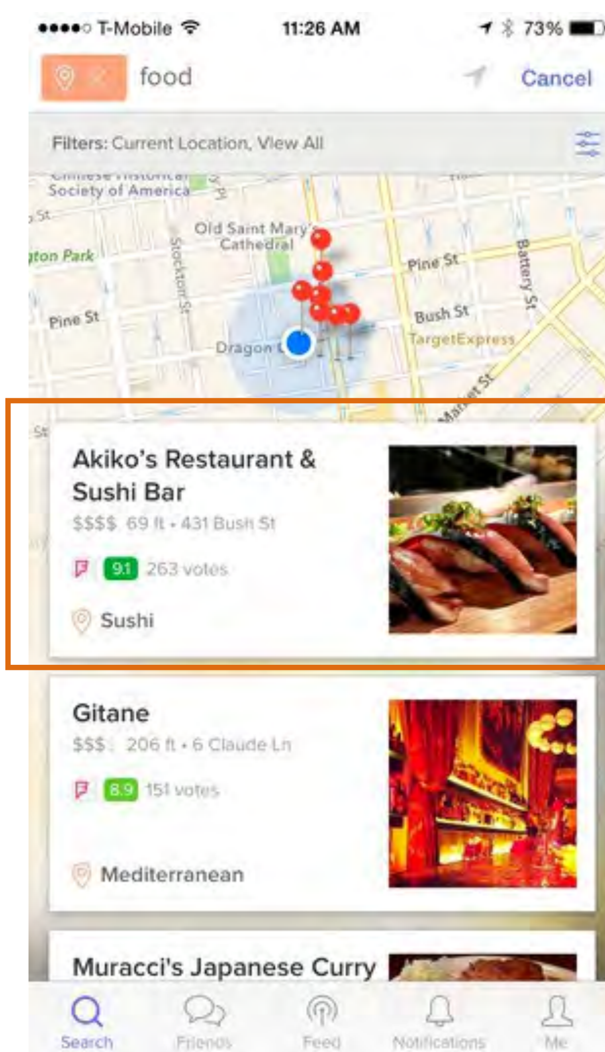
SEARCH

Mobile-Friendly Search Categories



CONTEXTUAL RESULTS

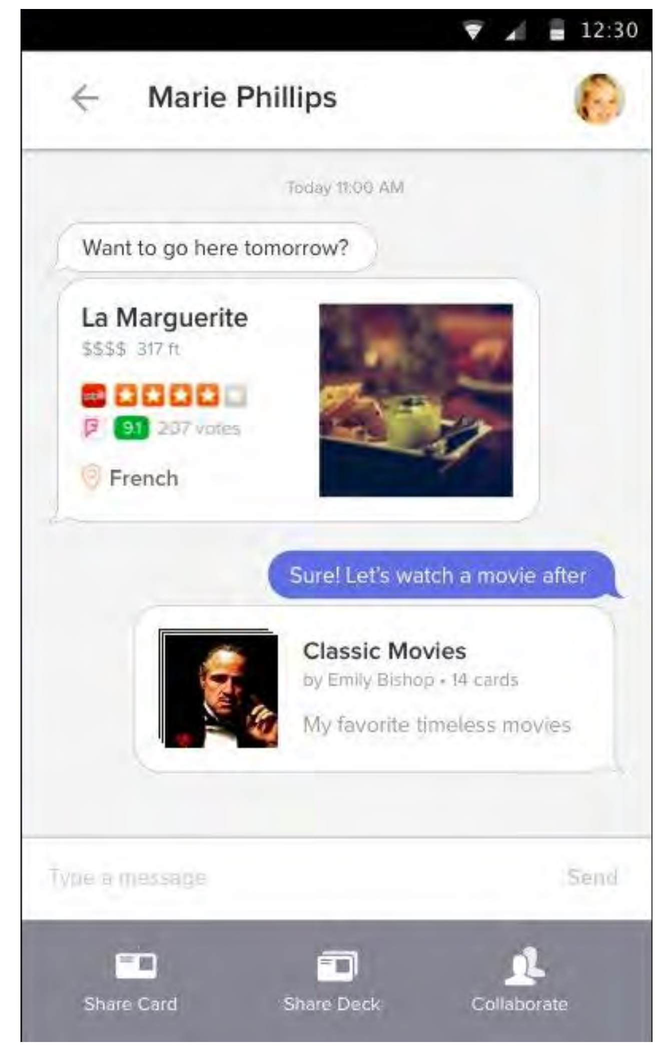
Context from Other Apps Aggregated into Search Results



INTEGRATION WITH MESSAGING

Users Integrate Search Results into Chats

August 2015



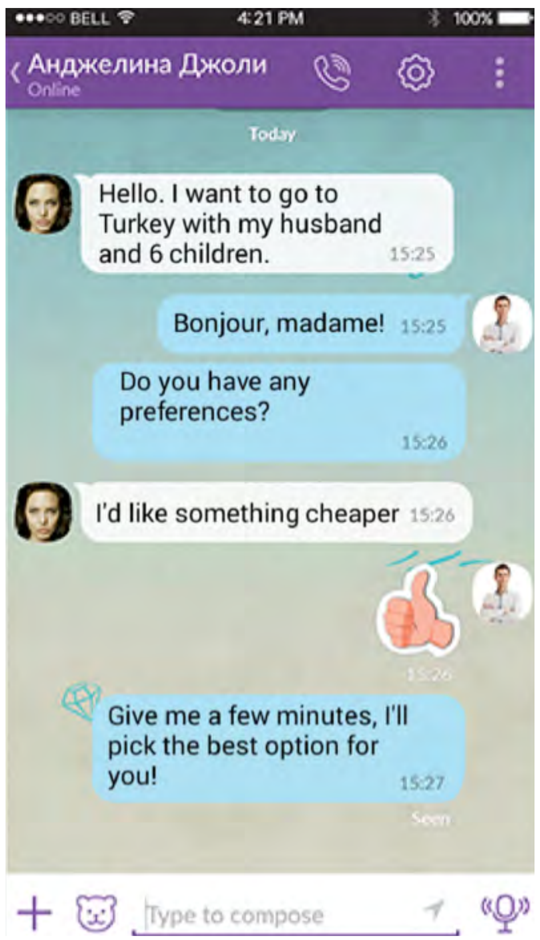
Sources: TechCrunch, vurb.com, CNBC, Activate analysis

New consumer businesses are being built on messaging platforms – this will expand as messaging bots become more ubiquitous

Platform-Specific Messaging Businesses (Operate through At-Scale Messaging Services)

POCKETTOUR

Third-Party Travel Agency on Viber



TRAVEL

Travel agency built on top of Viber for easy booking and correspondence with agents

WeBank

First-Party Bank Built by WeChat

PERSONAL FINANCE

Online-only bank that operates outside the WeChat interface but uses WeChat login credentials for its accounts

Jobot

Third-Party Bot on WeChat

CAREER

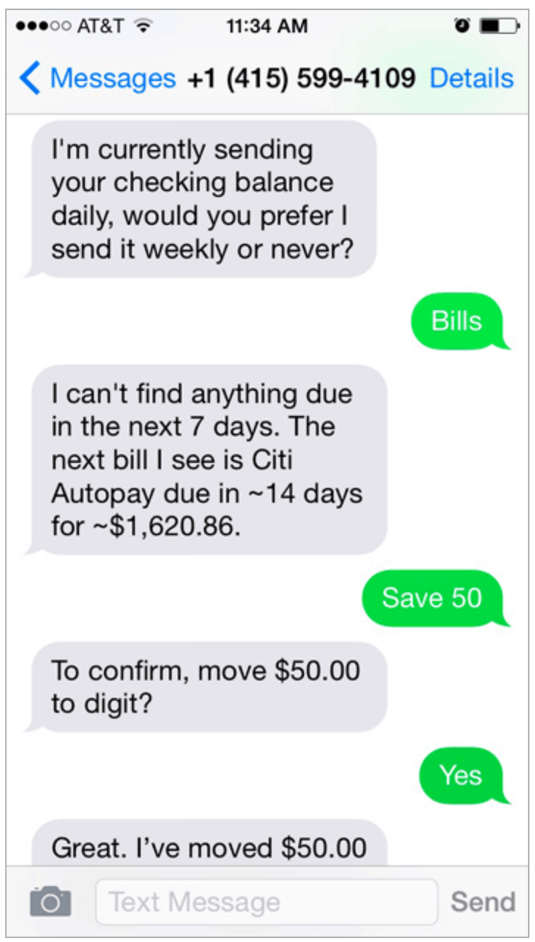
Bot that helps WeChat users search for jobs based on Q&A style conversations

Sources: Fortune, WSJ, Skift, TechCrunch, Activate analysis

In the US, low cost means consumer businesses can leverage both SMS and proprietary messaging platforms like Apple iMessage

Platform-Agnostic Messaging Businesses (Operate Through SMS or iMessage)

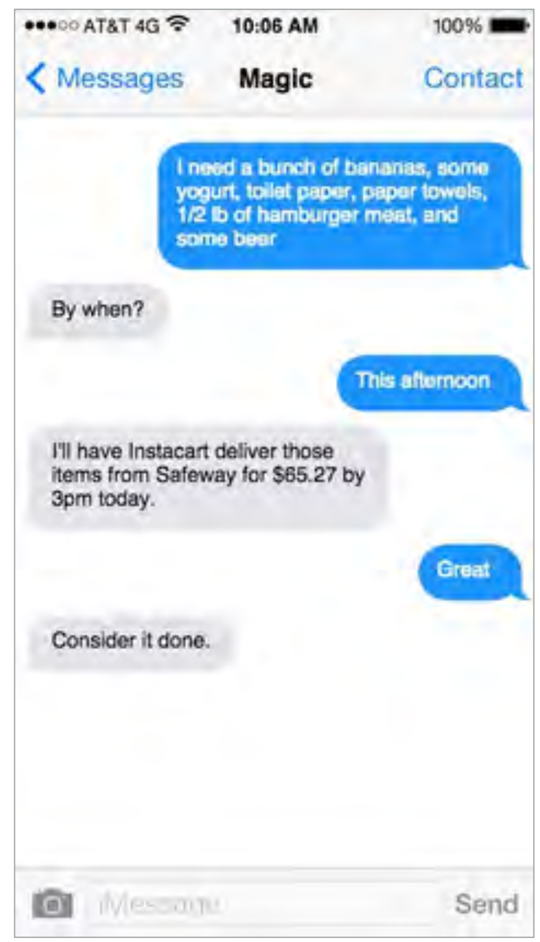
digit



PERSONAL FINANCE

Automated savings and daily updates on checking account balance, upcoming bills, and savings progress

Magic



PERSONAL ASSISTANCE

Message-based personal assistance for shopping, errands

ASSIST

TRAVEL

Chat with locals while traveling for immediate, person-to-person recommendations

Sources: angel.co, AdWeek, Quartz, Yahoo Finance

Enterprise is also starting to move to app-enabled messaging with bot integrations

slack

1.1m Daily Active Users
300k Paying Users

MESSAGING & SEARCH

LAYER #1 - MESSAGING

Real-time messaging with co-workers; flexibility to chat in 'channels,' 'private groups,' or 'one-on-one'

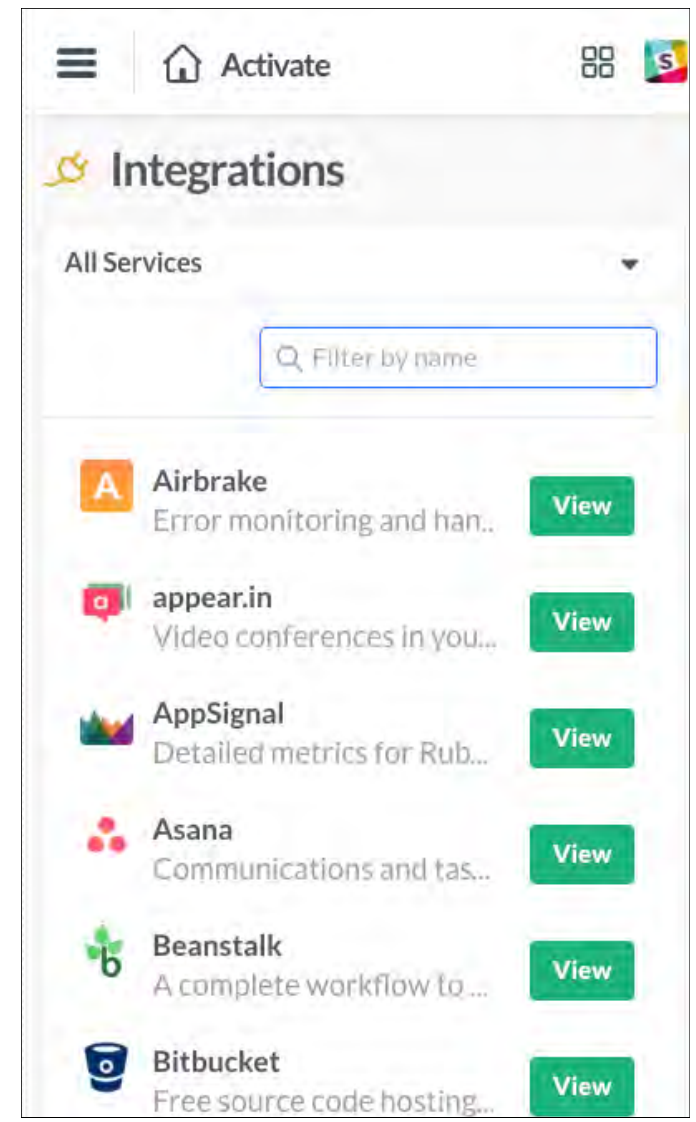
LAYER #2 - APPS & BOTS

Third-party integrations and automated bots function like an app store — this differentiates Slack from competition and is essential for adoption.

LAYER #3 - SEARCH

Enables users to sift through messages and files, over specific date ranges or from specific people

APPS & BOTS



Sources: slack.com, VentureBeat, TechCrunch, Medium, Activate analysis

What users do in native apps today, they will also do in messaging apps tomorrow – presenting an enormous revenue opportunity

New & Potential Functions for Messaging

Function	Innovator	Feature	Launch Date	Revenue Opportunity
News	Snapchat	Discover	1/2015	Sponsored content Native ads
Shopping	LINE	LINE Shop	2/2015	Percentage of transaction
Mobile Web	Kik	Kik Browser	4/2015	Advertising
Productivity	Facebook Messenger	'M' Virtual Assistant	8/2015	Search ads
Games	XBOX Live	Live Social Gaming	9/2015	In-game purchases Advertising
Finance	WeChat	WeBank Loans	9/2015	Interest from loans
Education	**TBD**	**TBD**	**TBD**	Fees for courses
Sports	**TBD**	**TBD**	**TBD**	Fees for betting Paid fantasy leagues
Health & Fitness	**TBD**	**TBD**	**TBD**	Advertising
Business	**TBD**	**TBD**	**TBD**	Paid job posts

Sources: Apple App Store, Google Play, Activate analysis

Asia-Pacific platforms demonstrate the money potential in messaging - and global players are just getting started

Platform Sophistication Compared to Annual ARPU, 2014

Service	Market Served (% users)	Ads	Stickers	Games	Taxi	Payments	App Store	Music	TV	Sub Fees	E-Commerce	URL Bar / Search	ARPU
WeChat	China (65%)	●	●	●	●	●	●	●	●		●		$7.00
KakaoTalk	S. Korea (43%)	●	●	●	●	●	●	●	●		●	●	$4.24
LINE	Japan (60%)	●	●	●	●	●	●	●	●		●		$3.16
WhatsApp	Global									●			$0.06
Viber	Global		●	●									$0.01
Facebook Messenger*	Global		●			●	●				●	●	$0.00

= Main Revenue Driver

Sources: Nomura, Andreessen Horowitz, Forbes, TechInAsia, The Economist, Activate analysis

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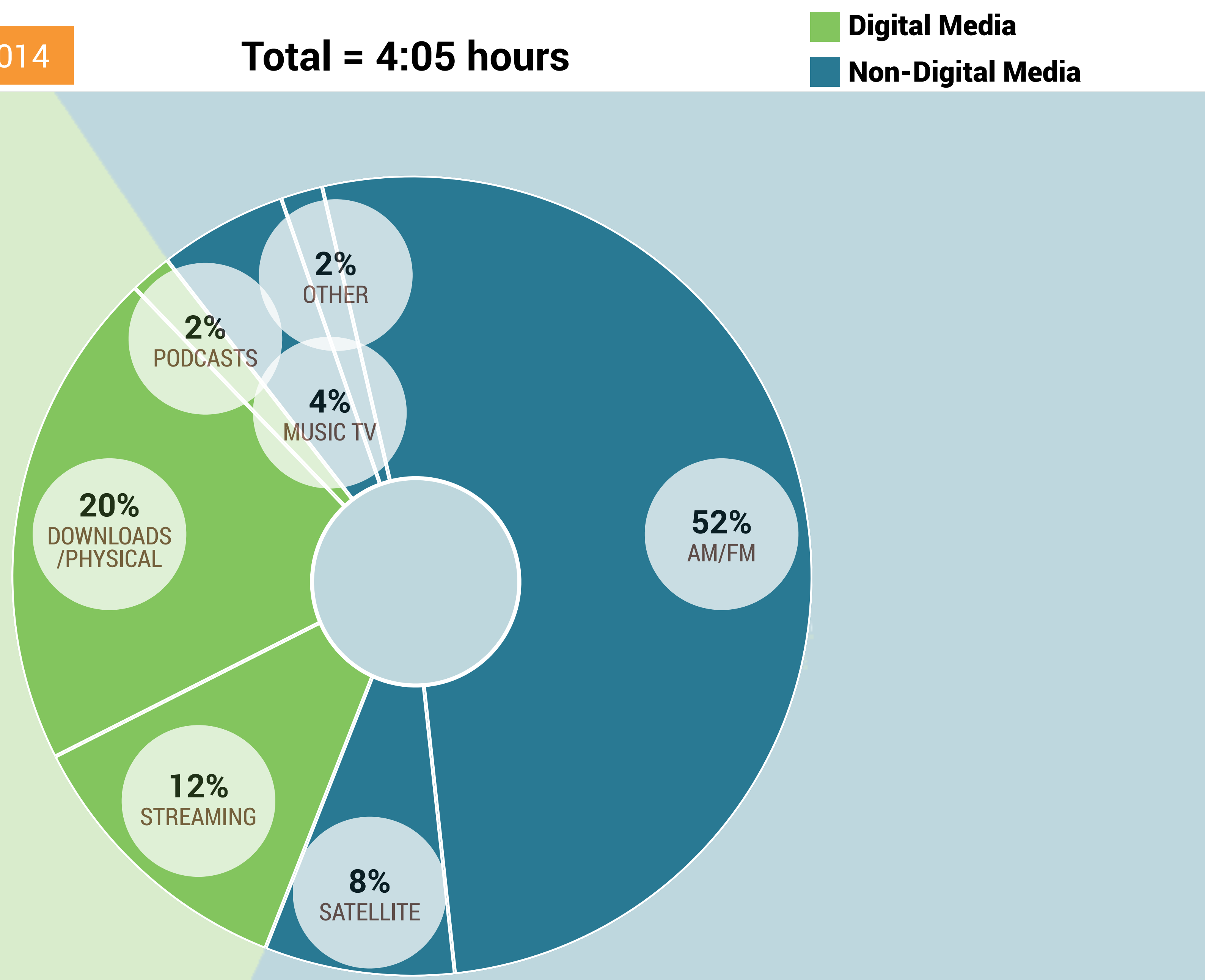
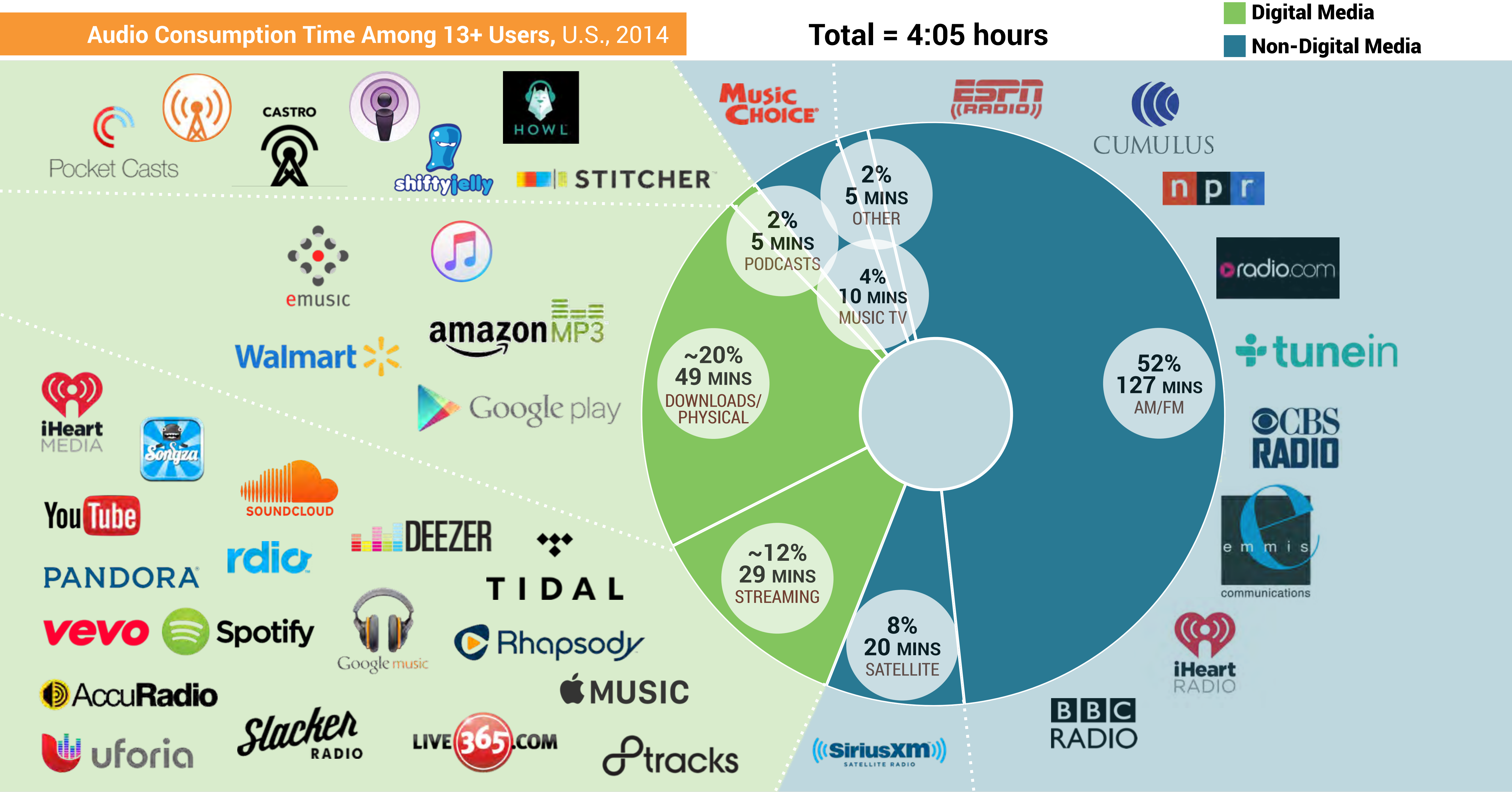
What's at stake in the audio market? Over four hours a day of listening time—and growing

Audio Consumption Time Among 13+ Users, U.S., 2014



Sources: Edison Research / Triton Digital, Activate analysis. AM/FM includes radio content consumed over digital platforms.

There's a proliferation of new digital players, but many crowded categories only represent a small fraction of overall listening



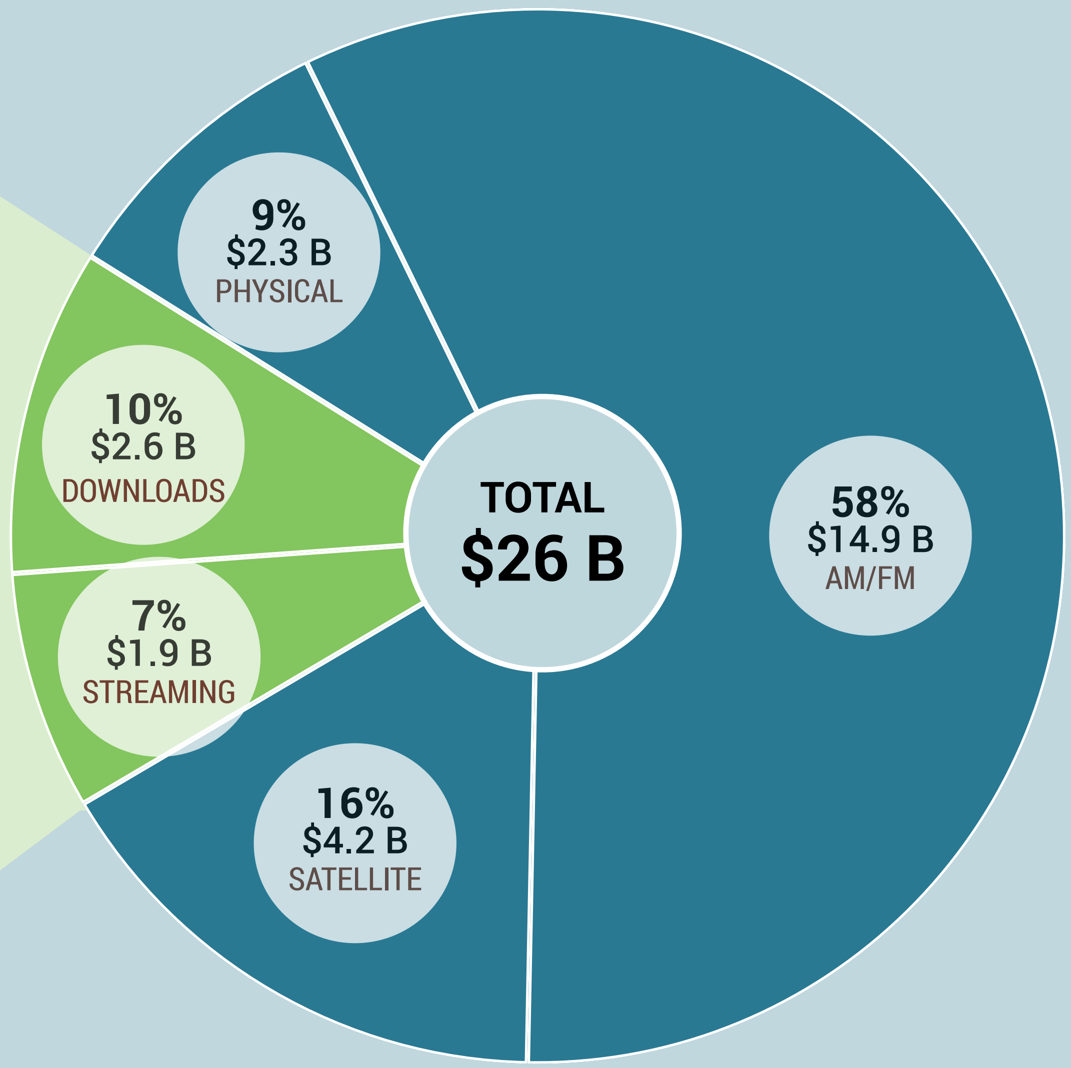
Sources: Edison Research / Triton Digital, Activate analysis. AM/FM includes radio content consumed over digital platforms.

Expect growth to come from digital players claiming their fair share of the pie

Consumer and Advertising Spend on Music Listening, U.S., 2014

Digital Media
Non-Digital Media

REVENUE IN $BILLIONS



DIGITAL takes up over a third of listening time, but less than a fifth of total revenue

TOTAL U.S. DIGITAL REVENUE

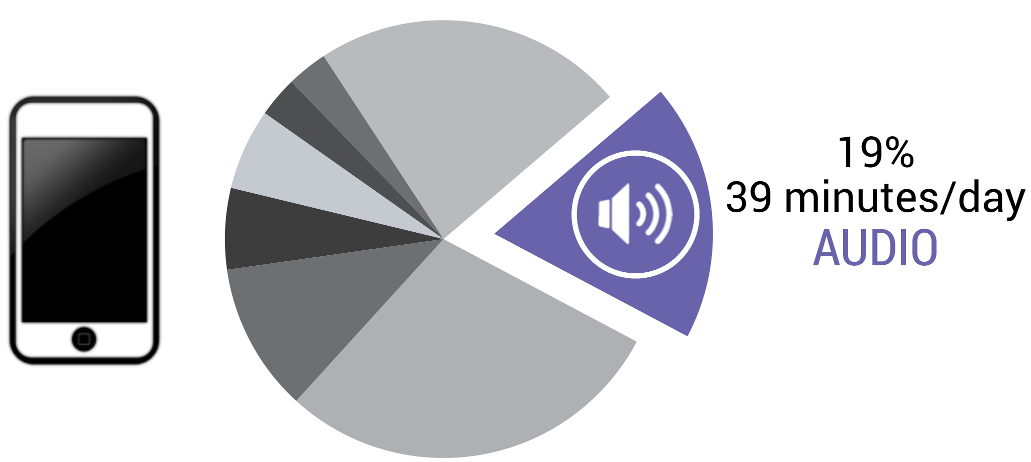
$4.5 B

Sources: Recording Industry Association of America, PwC, Radio Advertising Bureau, Ofcom, Activate analysis

Consumers will spend more time on digital audio, driven by multi-tasking moments

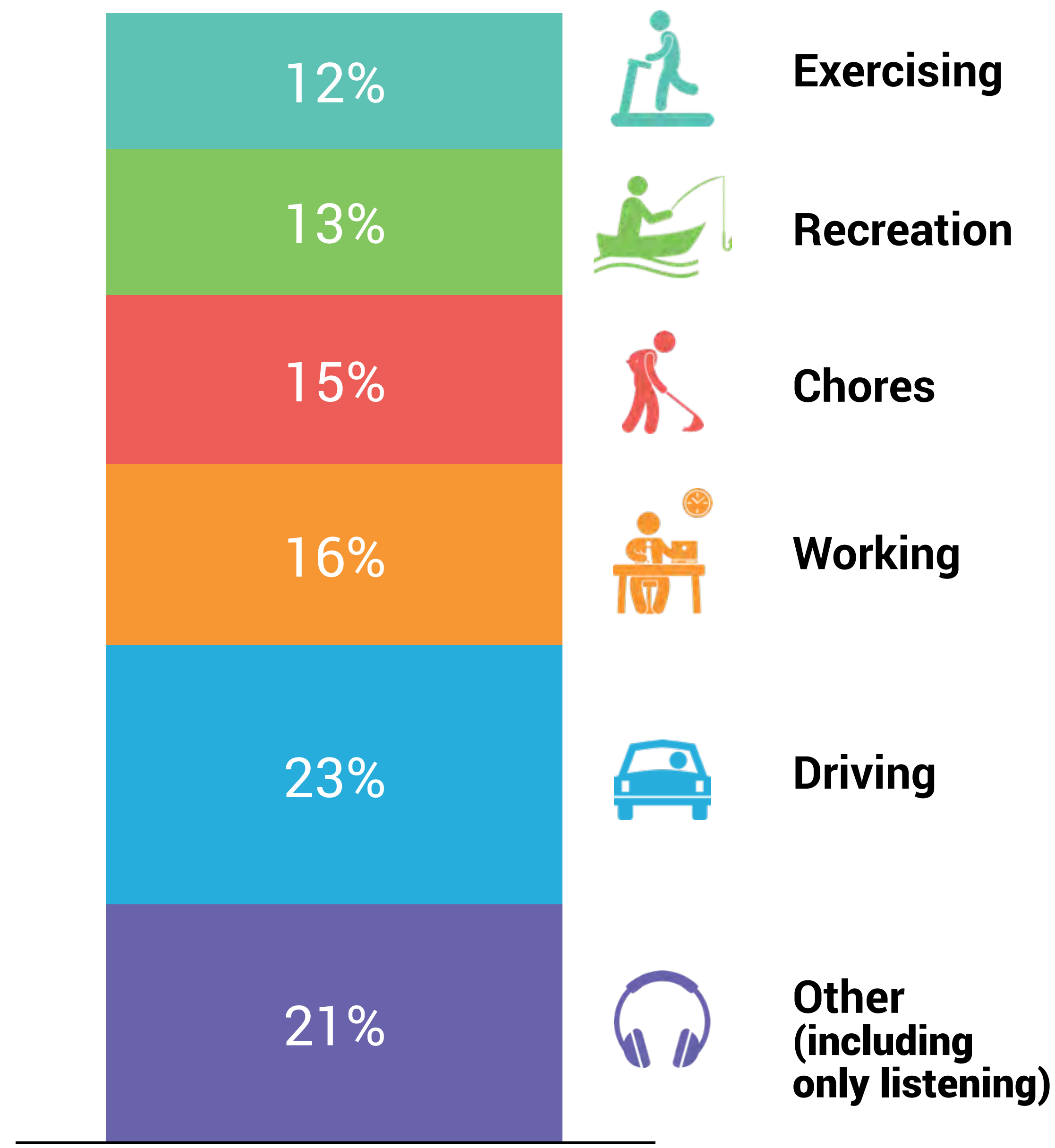
TYPICAL U.S. DAILY BEHAVIOR, AGES 13+ 2014

SHARE OF MOBILE APP TIME SPENT, June 2015



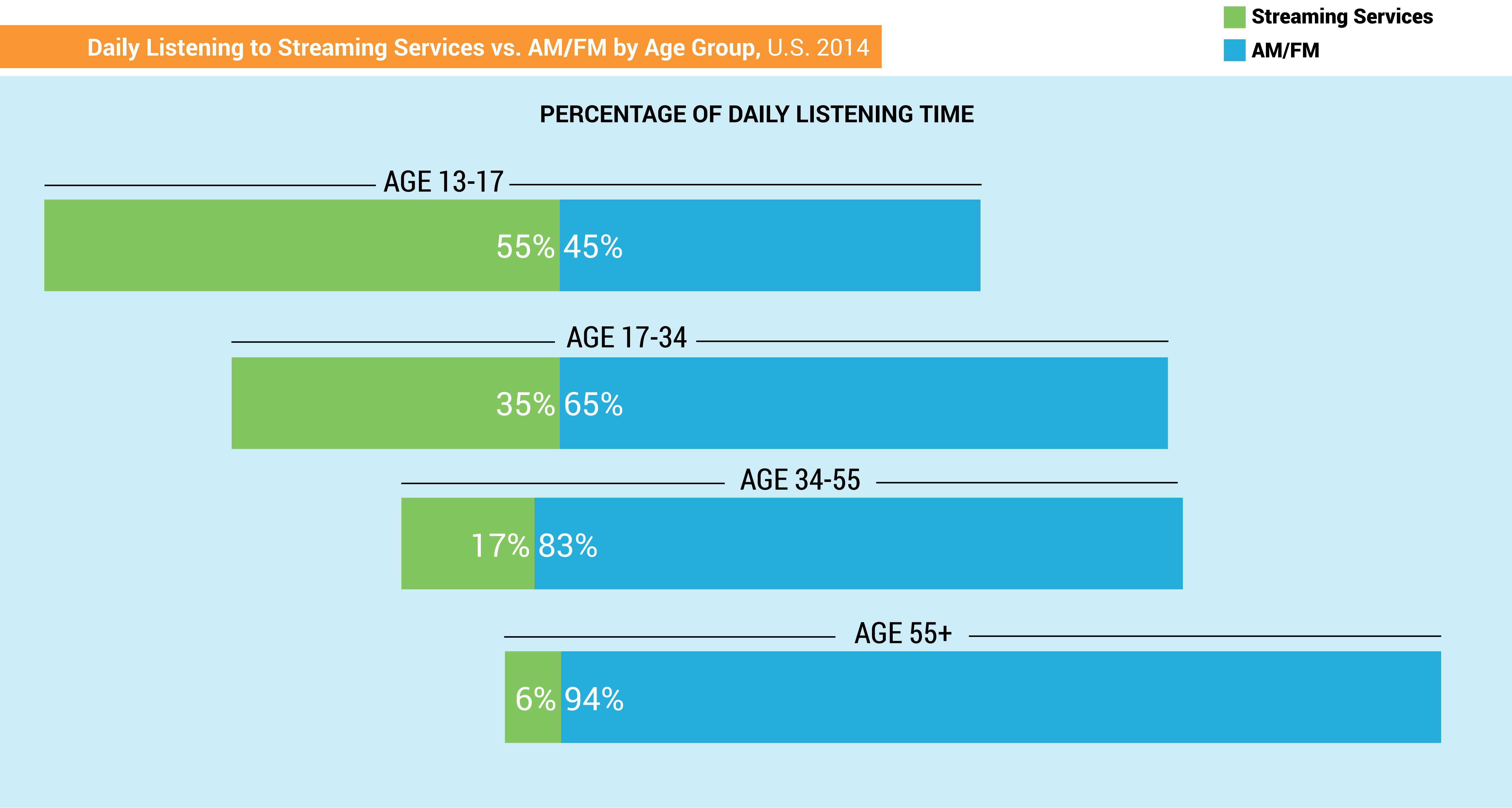
Total mobile app time: 3:25 hours/day

WHILE LISTENING TO MUSIC, AMERICANS (13+) ARE ALSO:



Today, young listeners spend more time listening through streaming, but AM/FM radio remains the largest overall

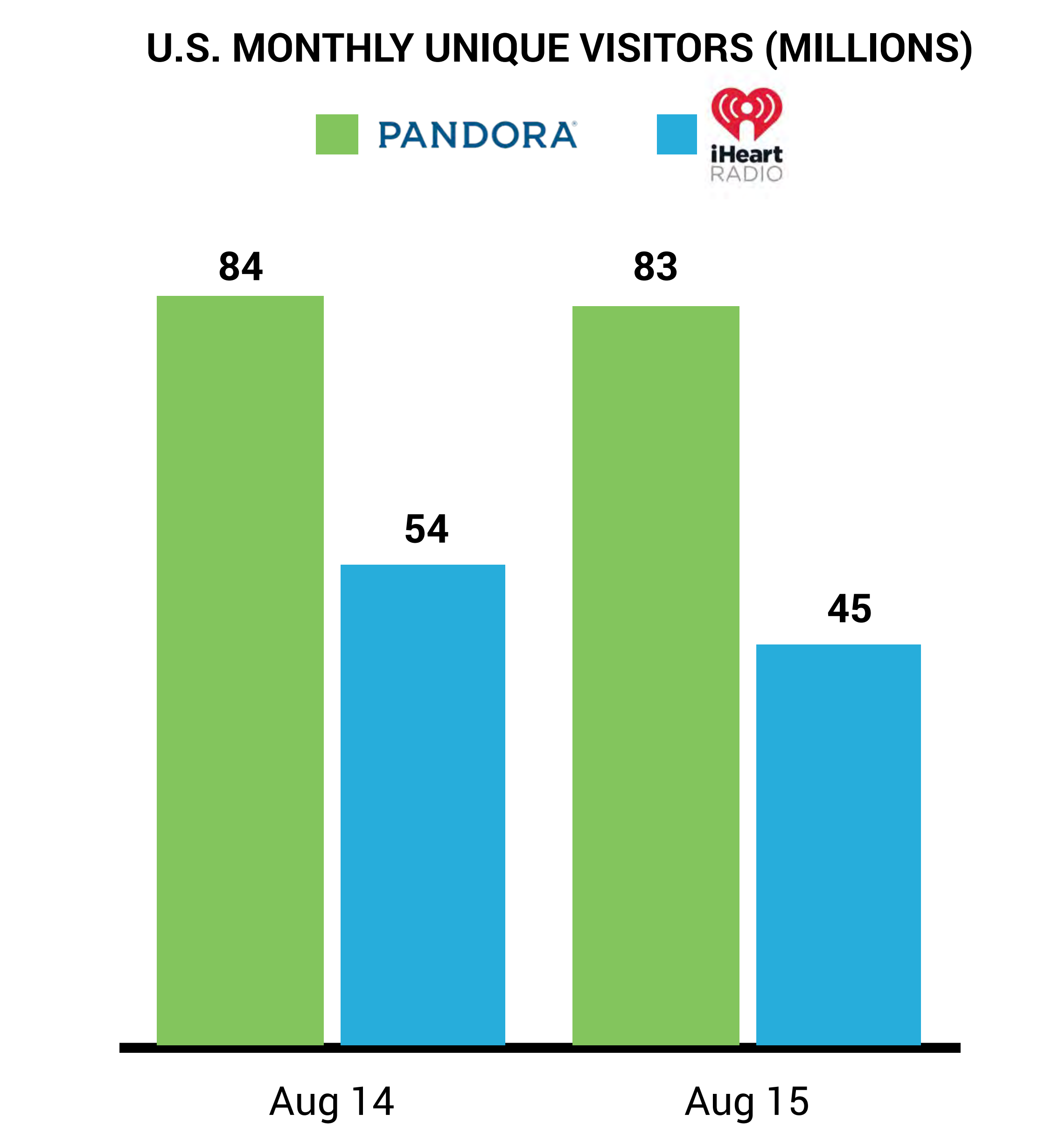
Daily Listening to Streaming Services vs. AM/FM by Age Group, U.S. 2014

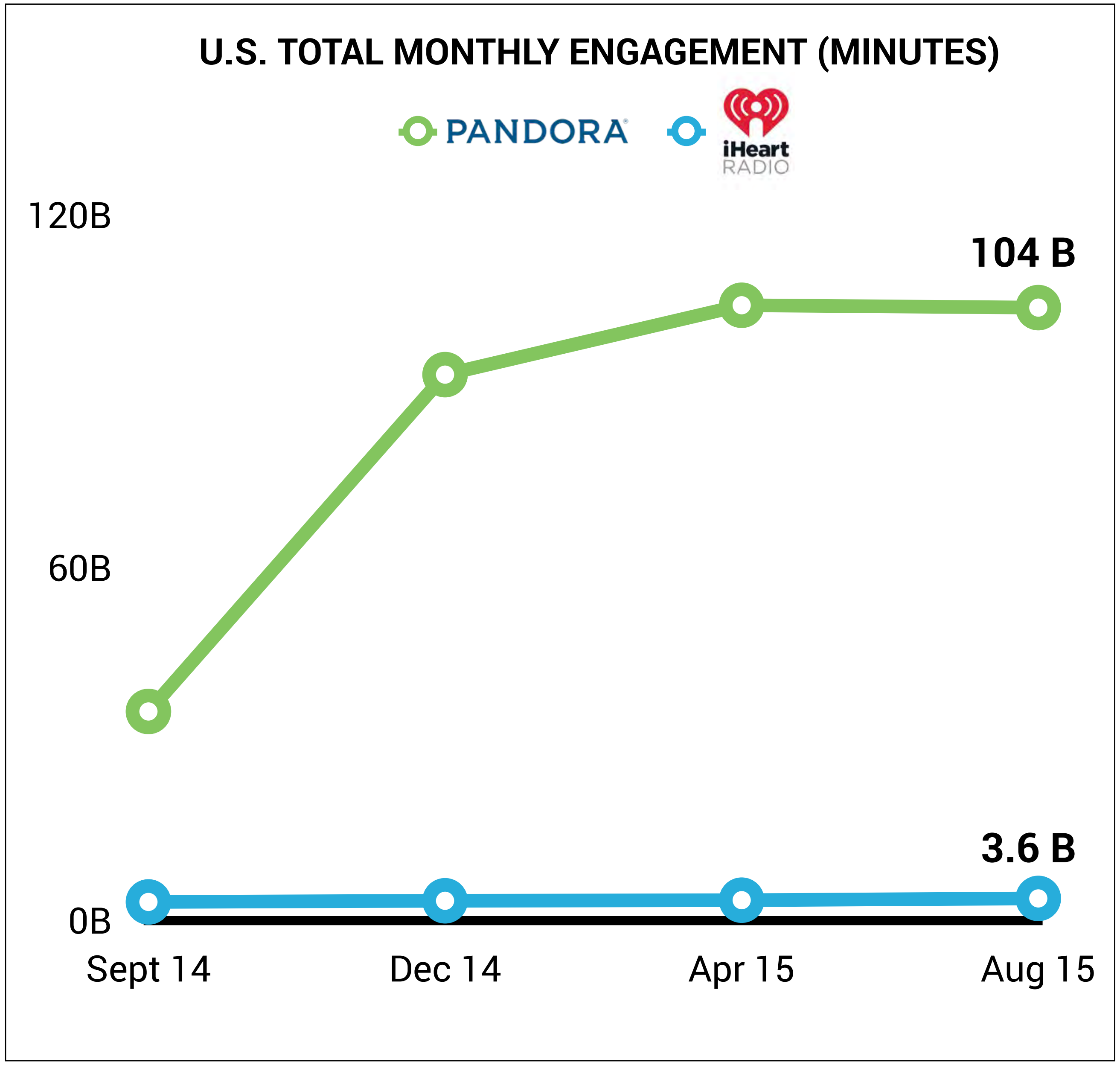


Sources: U.S. Census, Edison Research, Activate analysis

Legacy players have migrated audiences to digital streaming services, but inferior user experiences leave engagement lagging

Monthly Visitors vs. Total Digital Engagement, Pandora and iHeartRadio

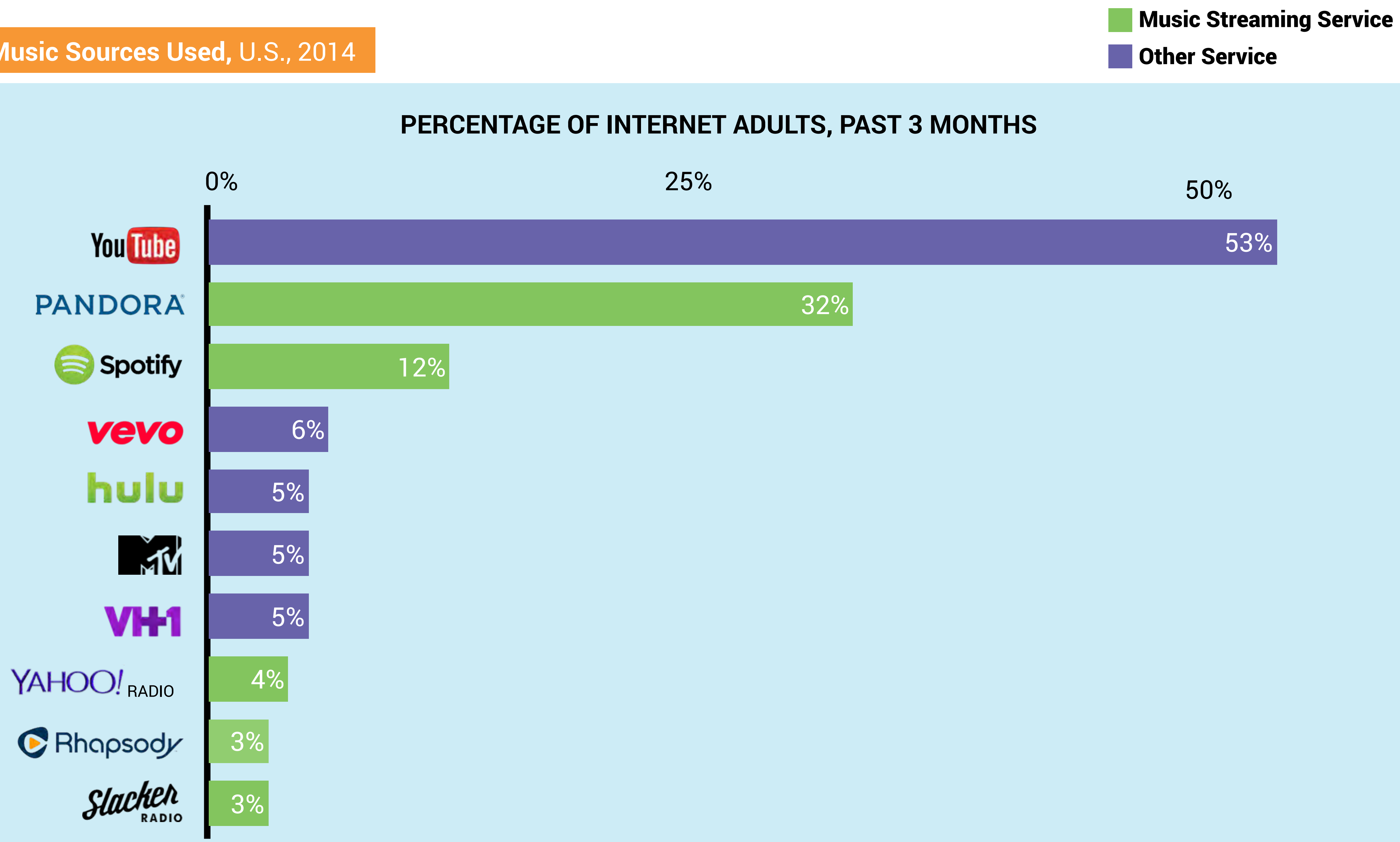




Sources: comScore, Activate analysis

If we isolate YouTube's audio usage, online music was dominated by three services last year — with different user experiences and monetization models

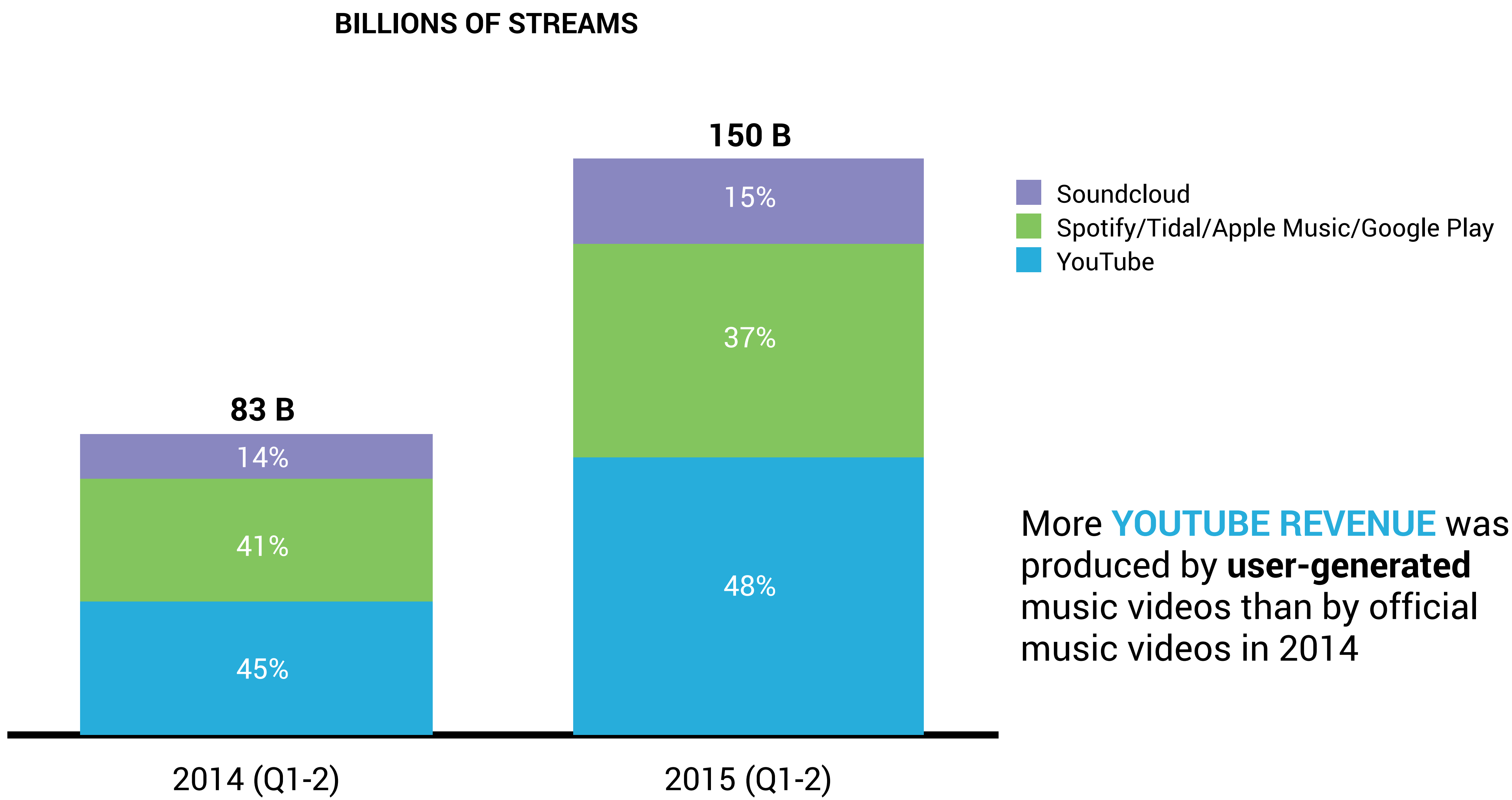
Music Sources Used, U.S., 2014



Sources: SNL Kagan, SESAC, Activate analysis. Music includes music videos; Survey predates launch of Apple Music

YouTube is even more dominant for on-demand streaming, representing over half of all on-demand streams

Total Streams by Service, Q1 - Q2, 2014 vs. 2015



More **YOUTUBE REVENUE** was produced by **user-generated** music videos than by official music videos in 2014

Sources: Nielsen, Digital Music News, Next Big Sound, Activate analysis. Pandora excluded as not on-demand

Today, Spotify and Pandora are not in the same business: they cater to two different audiences, and have different monetization models

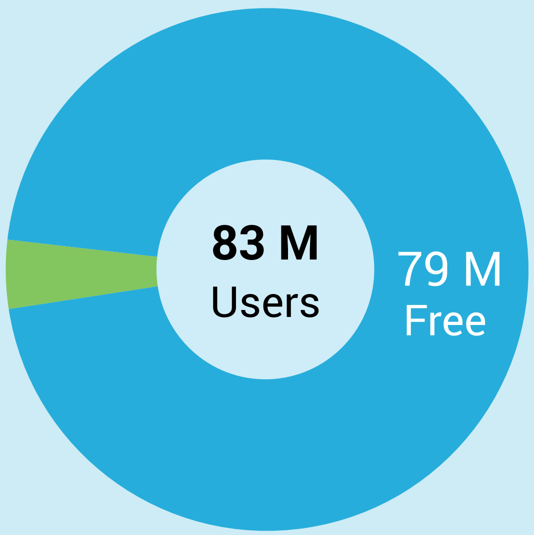
USERS BY TYPE, 2015 YTD

REVENUE SOURCES, 2014

KEY FEATURES

PANDORA

4 M
Paid



79 M
Free

$190 M
Suscriptions

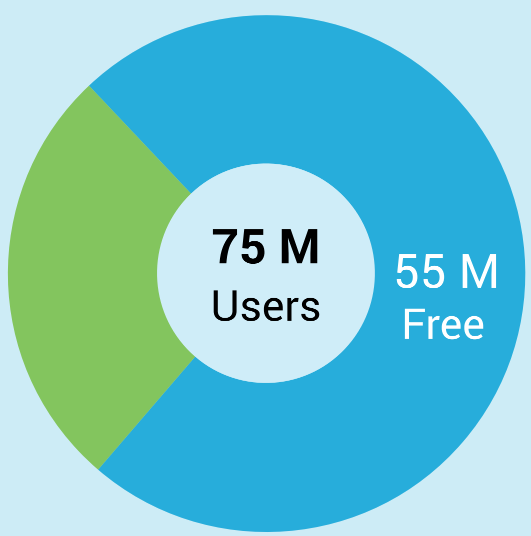
$730 M
Advertising

SUFFICIENT FOR MORE PASSIVE LISTENERS

- ✓ Library size 1.5M
- ✓ 64k free, 192kbps paid
- ✓ No exclusives
- ✓ No offline listening
- ✓ No tracks on demand

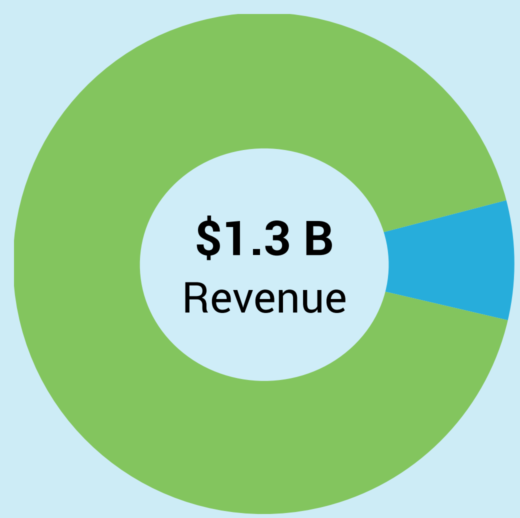
SPOTIFY

20 M
Paid



55 M
Free

$1.2 B
Suscriptions



$100 M
Advertising

ABLE TO CATER TO MORE ACTIVE LISTENERS

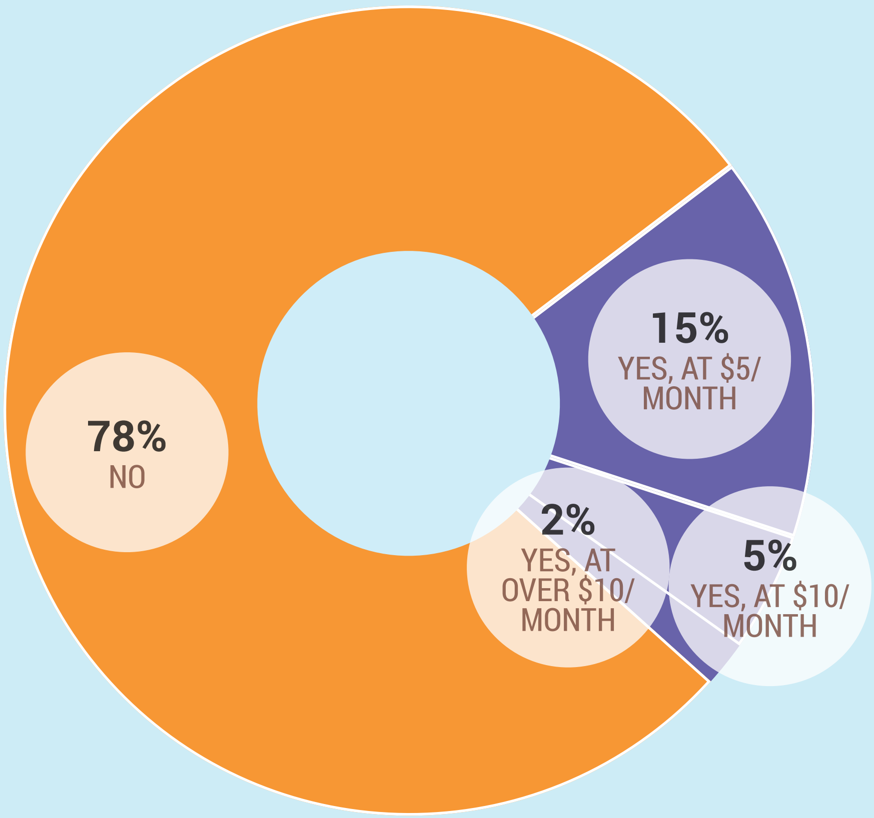
- ✓ Library size 30M+
- ✓ 96/160k free, 320kbps paid
- ✓ Exclusives
- ✓ Paid offline listening
- ✓ Tracks on demand

Sources: Spotify, Pandora, Activate analysis. Spotify available in 50+ countries; Pandora available only in United States, Australia, New Zealand

Subscriber loyalty will present a challenge to new services, but YouTube has a shot because music listeners are willing to pay

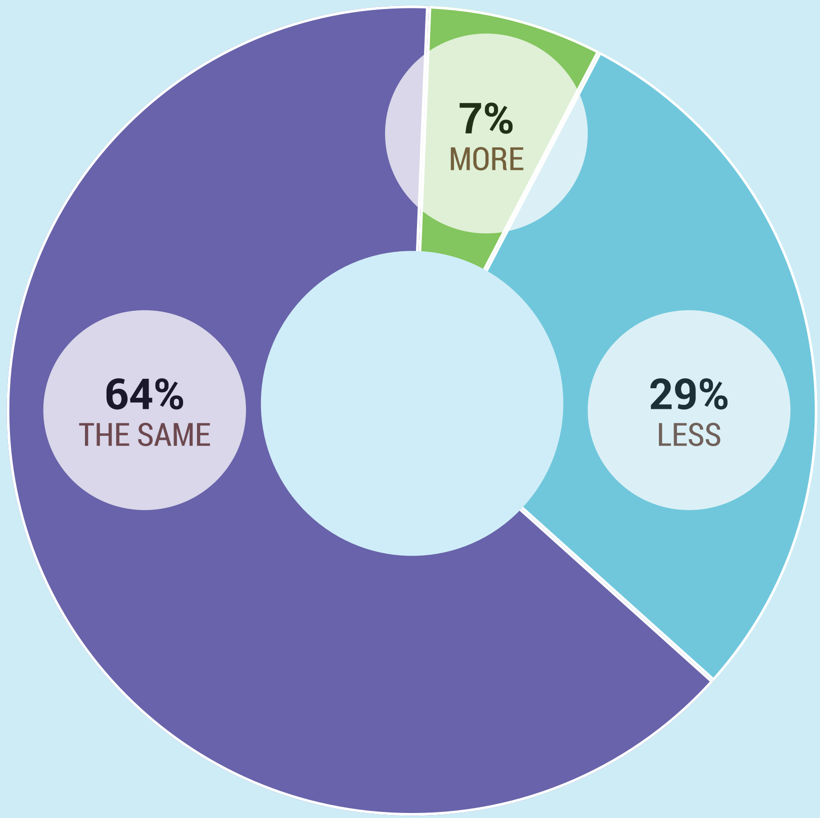
Consumer Preferences in the Digital Streaming Music Space

EXISTING STREAMING SUBSCRIBERS:
WILLINGNESS TO SWITCH TO ANOTHER SERVICE



n=220

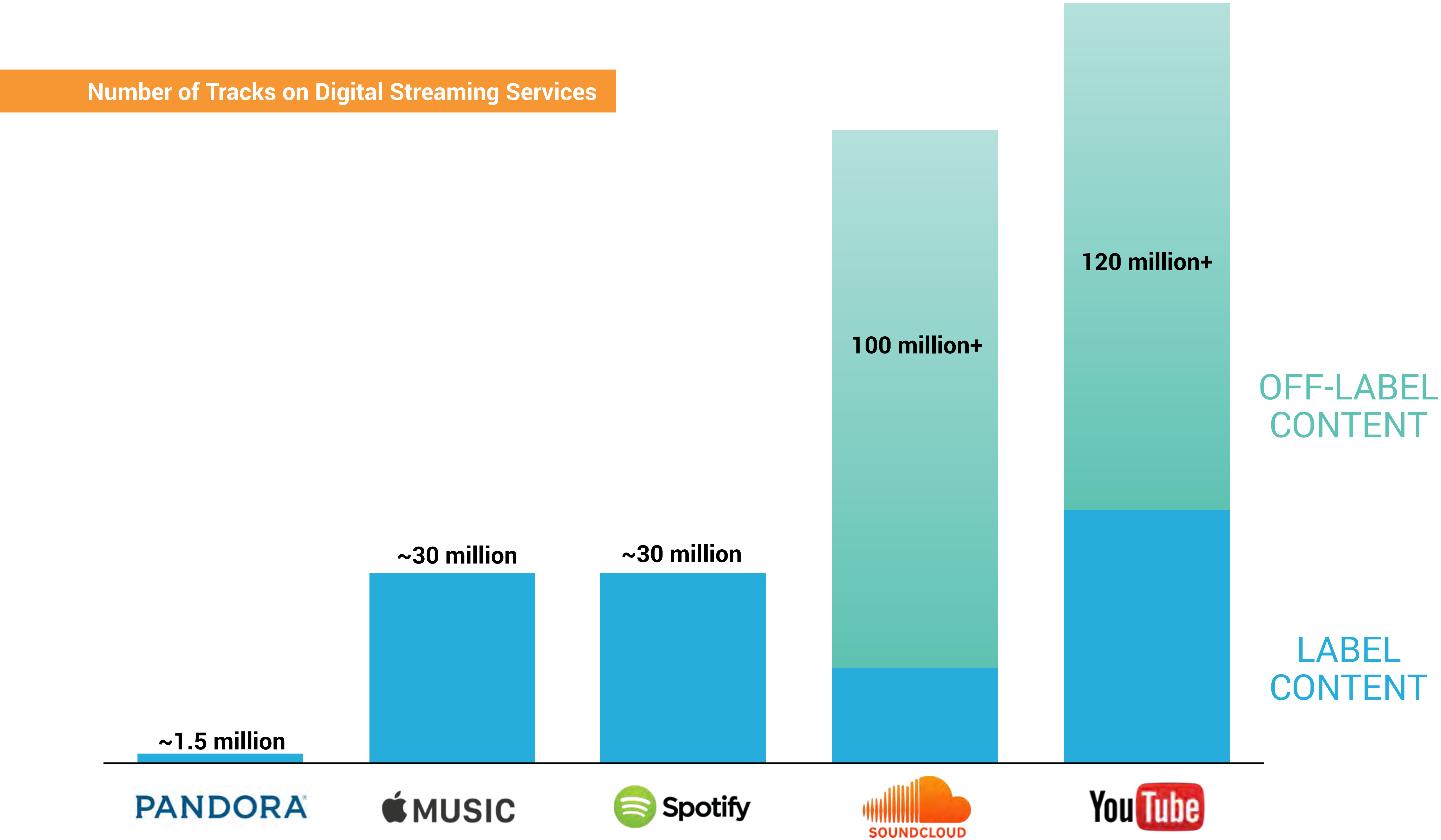
POTENTIAL STREAMING SUBSCRIBERS: PRICE TO JOIN A YOUTUBE STREAMING SERVICE, COMPARED TO EXISTING SERVICES



n=342

Sources: Activate survey of adults 18+, October 2015, Activate analysis. Excludes consumers who are unlikely to or will not subscribe to a music streaming service in the next 12 months

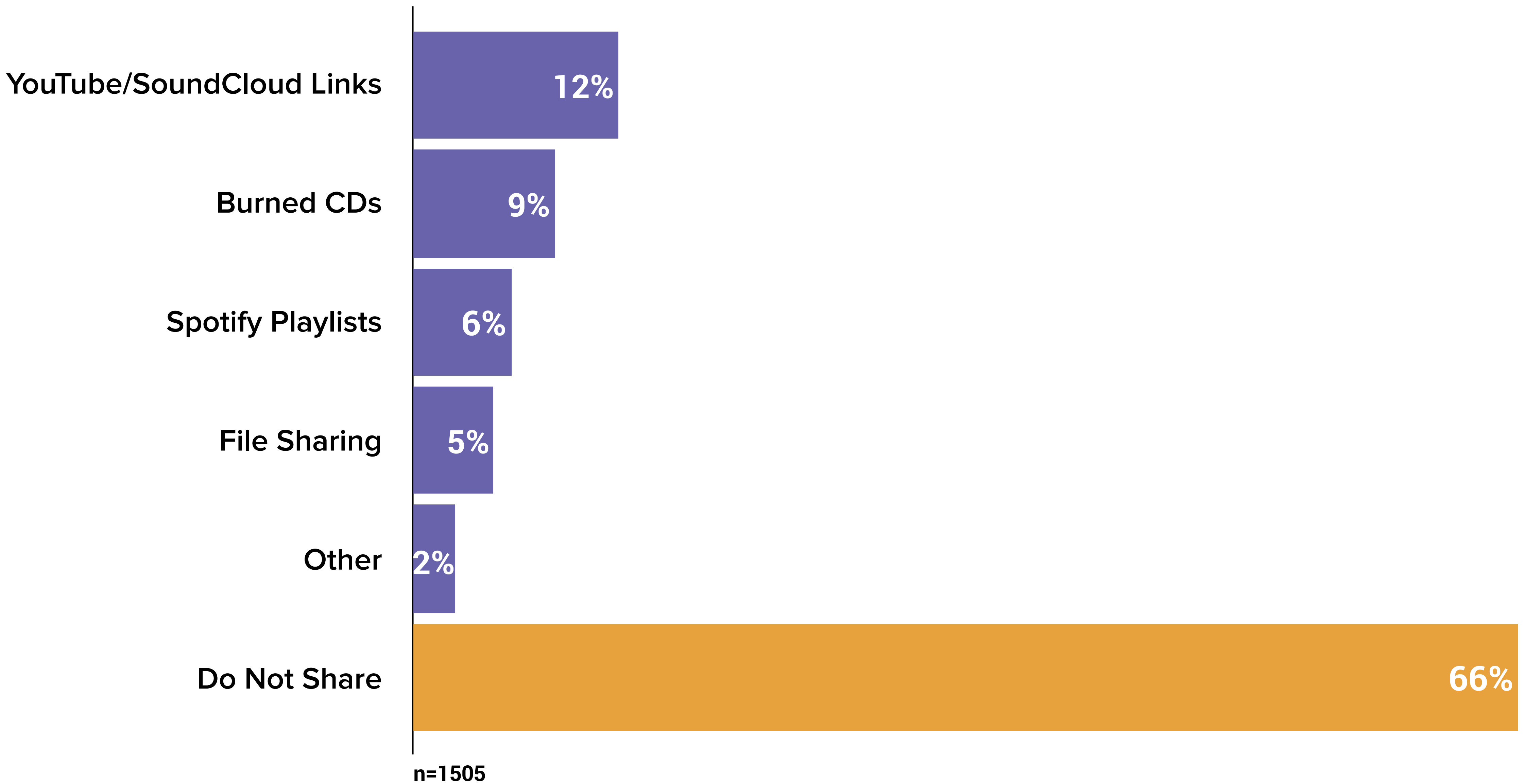
What could make a major new entrant successful? Original, unique songs as found on SoundCloud and YouTube will be a critical factor



Sources: Apple, SoundCloud, Spotify, Pandora, Interviews, Activate analysis

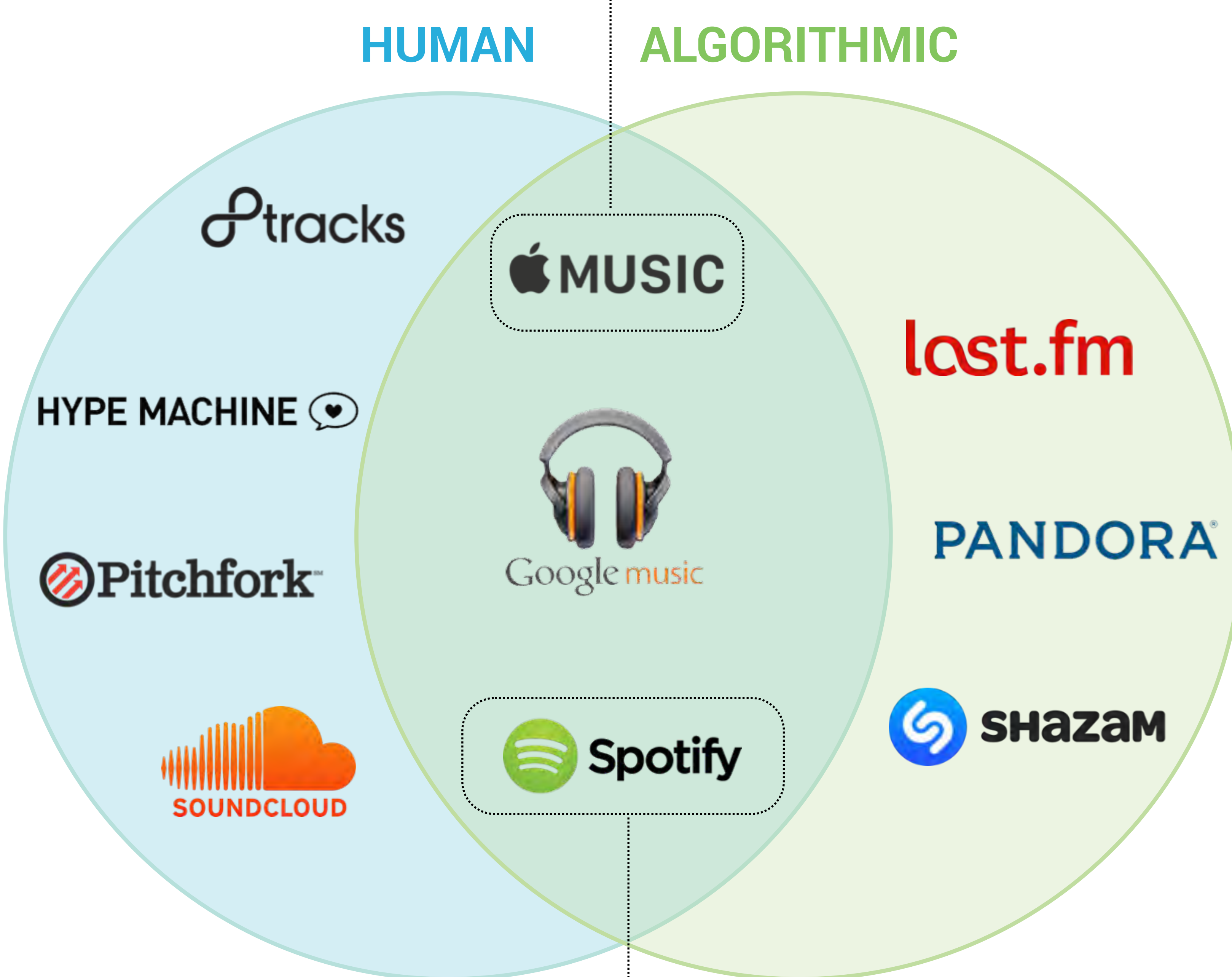
Today, most listeners don't share their listening activity on social networks, creating an opportunity for any player that can improve the sharing experience

Audio Social Sharing Preferences

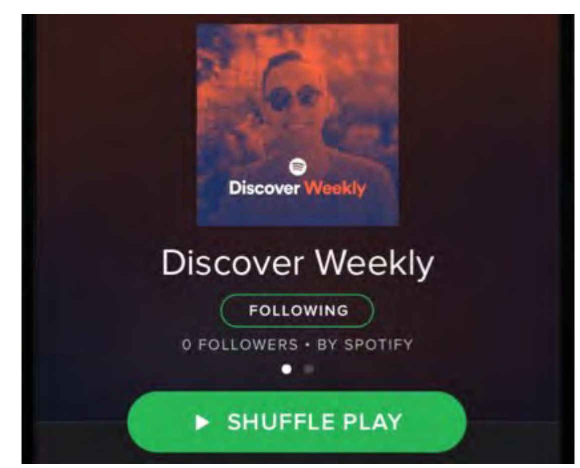


Sources: Activate survey of adults 18+, October 2015, Activate analysis

Another major area of differentiation will be smart curation that combines human and algorithmic methods



Emphasis on human curation with Beats1 radio station



Emphasis on algorithmic recommendations with personalized “Discover Weekly” playlists

Sources: Spotify, Apple, Activate analysis

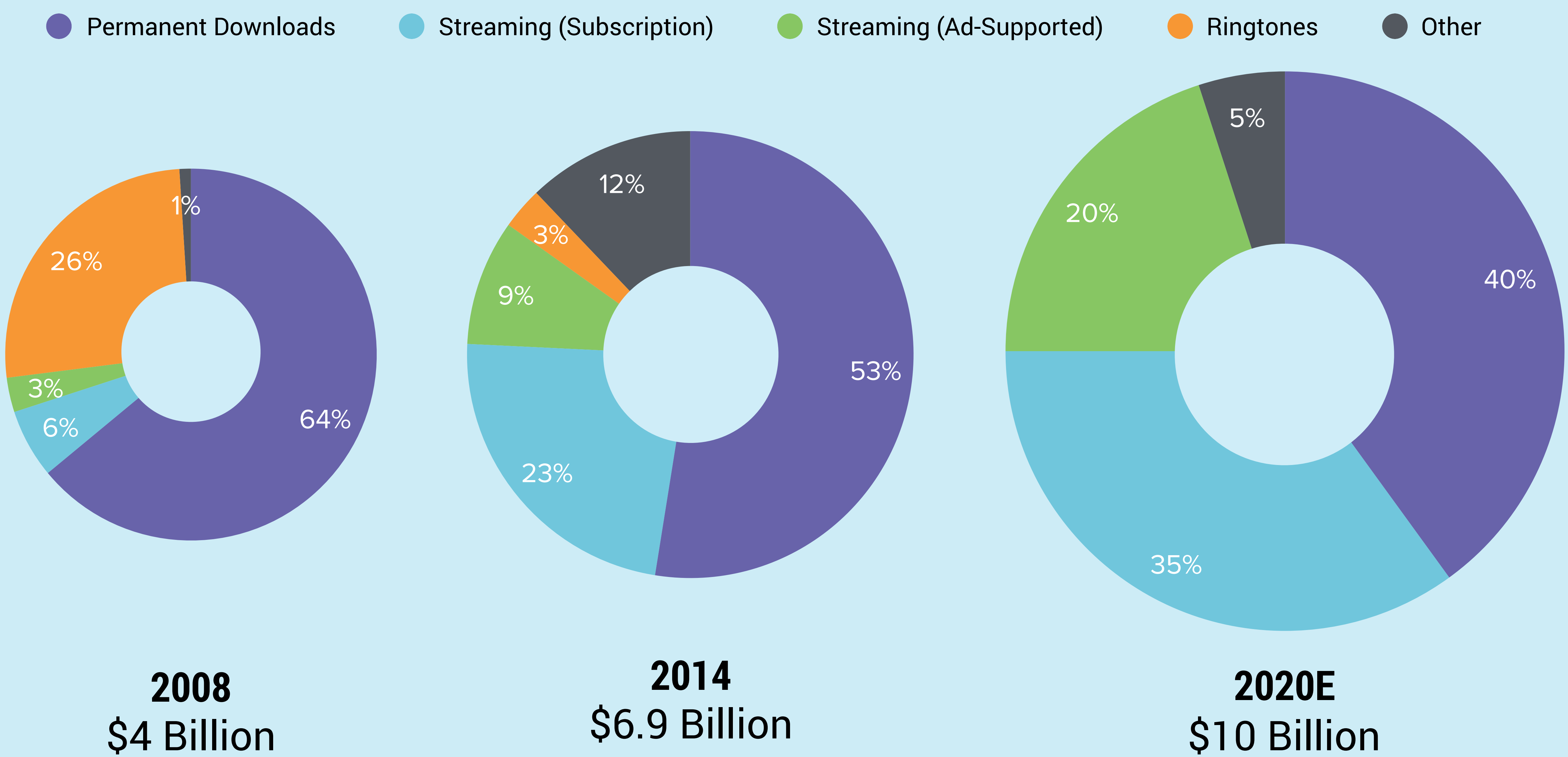
Some of the features that enable new players to succeed may revisit features from past generations of digital music services

THEN	NOW	SOON
SOCIAL last.fm, imeem First generation social sharing services offered more utility than today's features	**SOCIAL** Spotify, 8tracks Despite Facebook integration, users can't see friends' listening history or libraries	**SOCIAL** The most successful streaming services will allow for seamless viewing of friends' playlists and integrate social networking into curation algorithms
SEARCH musicmatch, URGE Innovative tagging and search features enabled simple access to a wide variety of content	**SEARCH** HYPE MACHINE, SHAZAM Listeners are able to discover new music through web popularity and the ambient world	**SEARCH** Universal audio search engines will allow listeners to find tracks across different streaming services
PLAYLISTS Ping, Grooveshark Users could choose between their own playlists and algorithmic selections	**PLAYLISTS** Slacker Radio, SONOS Services can aggregate playlists from a variety of different sources, and centralize a user's lists	**PLAYLISTS** A combination of user selection, expert curation, and recommendation algorithms will help users create a personal stream

Sources: Interviews, Activate analysis

By 2020, digital music revenues will be $10 Billion globally, and streaming will be over half of that - growing at the expense of downloads

Activate Forecasts for Digital Music Revenue by Source, Global

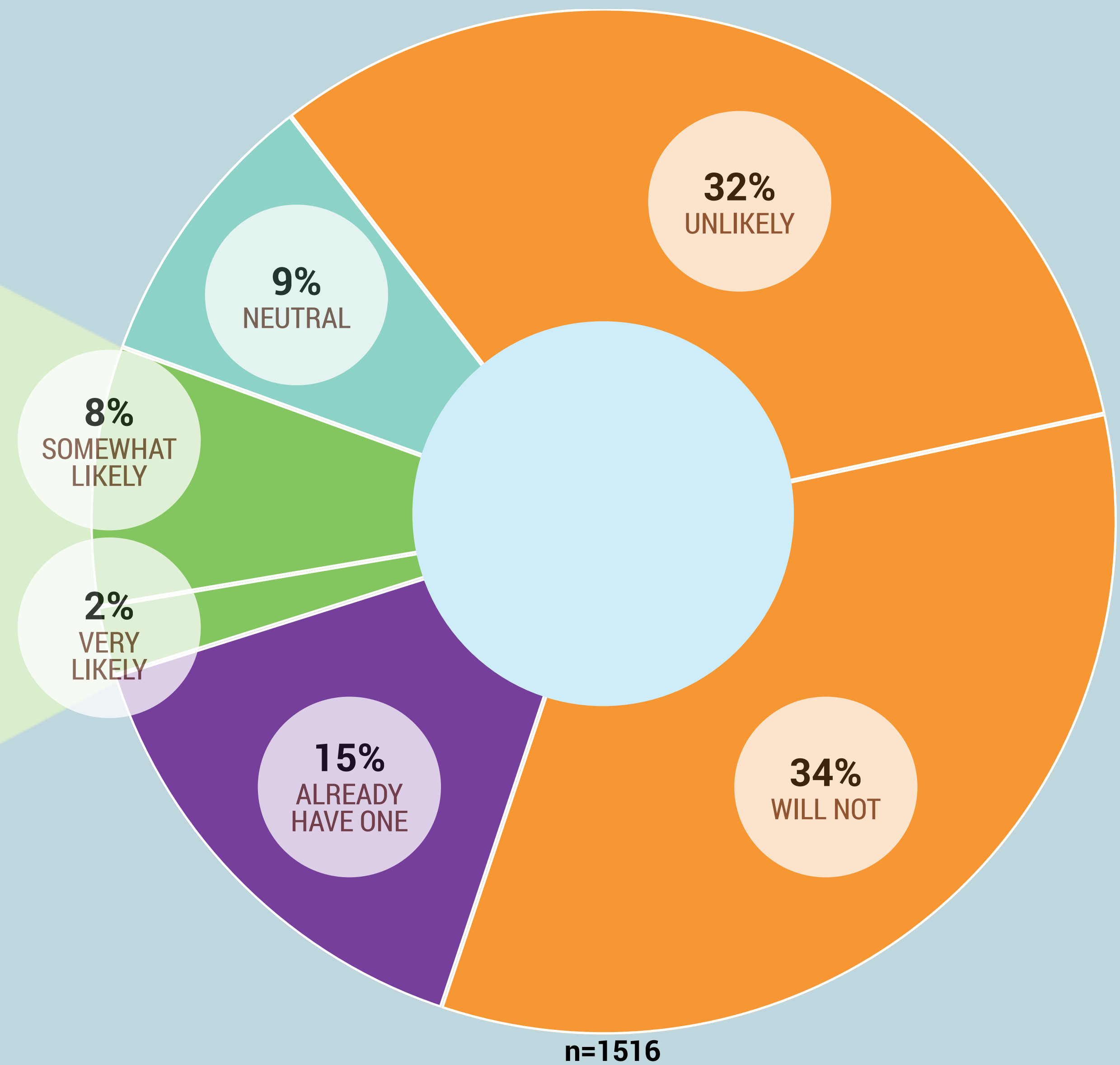


Sources: IFPI, Activate forecast

There may be an upper bound to the number of consumers that are willing to pay for a subscription music service

U.S. Consumer Likelihood of Purchasing Music Streaming Subscription in the Next 6 Months

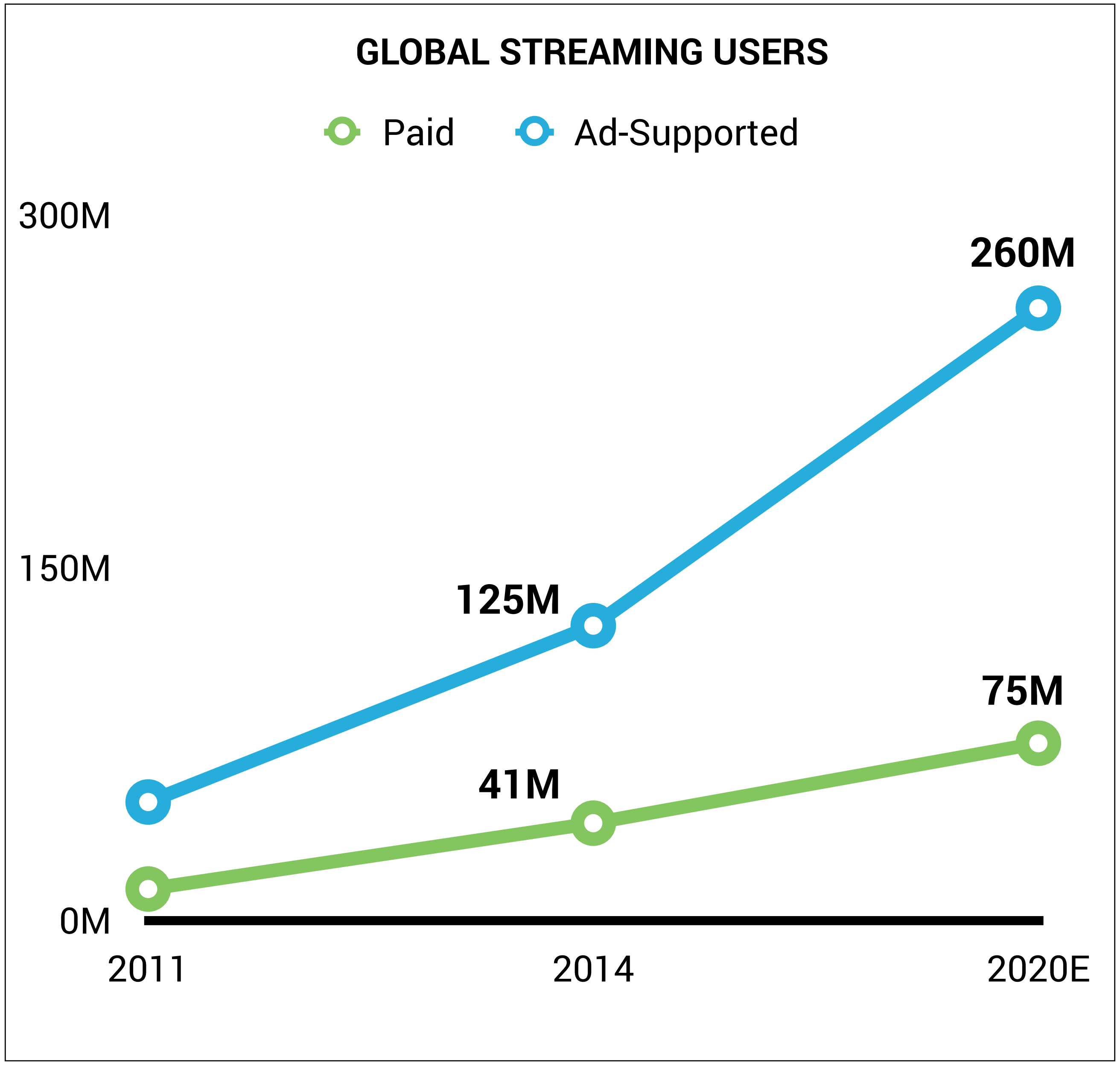
Only an **additional 10%** of consumers are open to subscribing to a streaming service

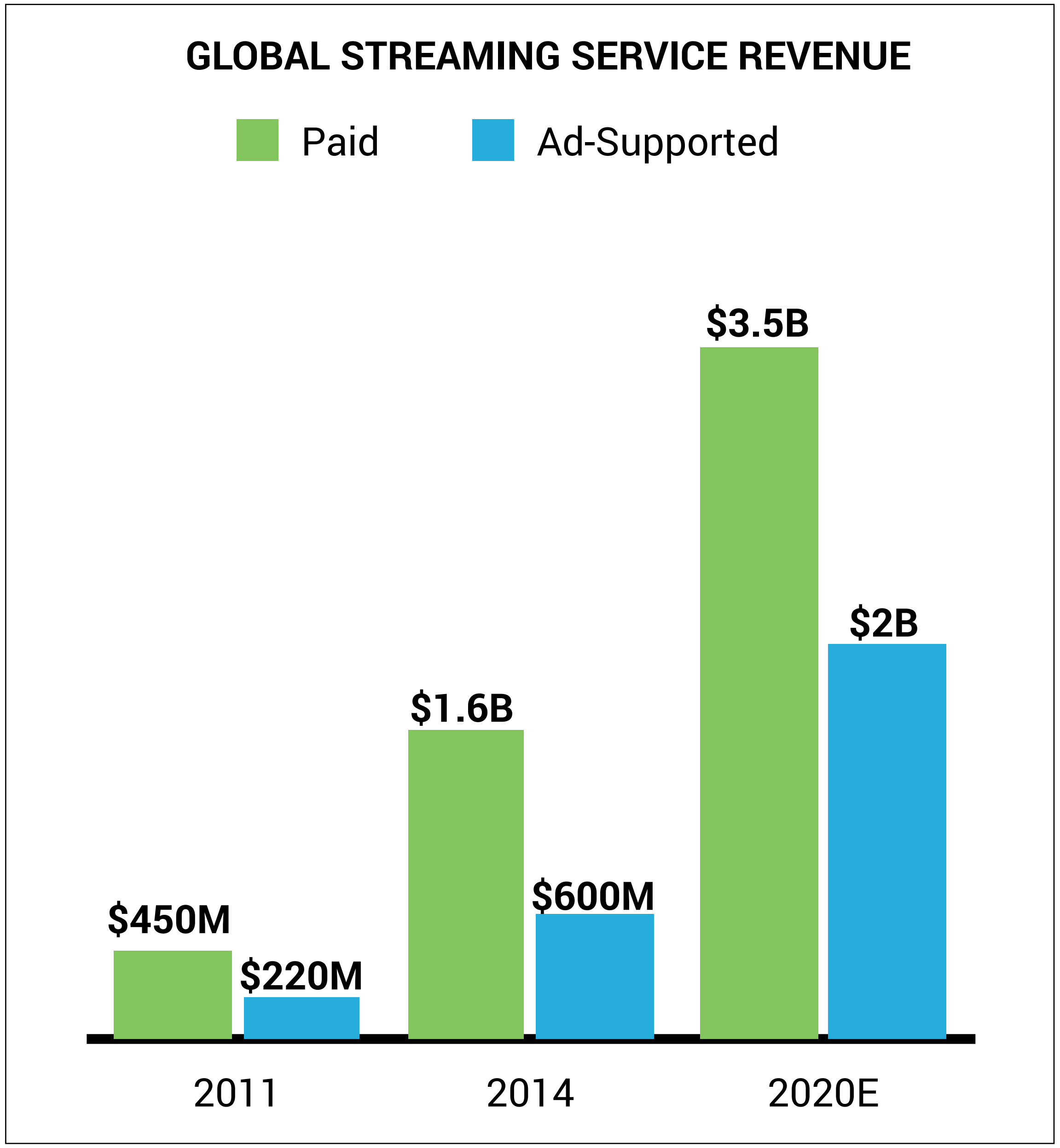


Sources: Activate survey of adults 18+, October 2015, Activate analysis

Most of user growth in digital streaming will be ad-supported, but paid users will account for a far greater proportion of the revenue

Annual User and Revenue Growth in Digital Music Streaming, Global, 2011 - 2020E





Sources: IFPI, Activate analysis

Beyond music, opportunities abound in non-music formats as listeners move from analog to digital

THEN → NOW → SOON

THEN

TALK

Linear consumption on AM/FM leads to long slots at specific daily times

NOW

TALK

Podcast consumption is exploding as non-live distribution lets users listen on demand

SOON

TALK

Increasing sophistication in podcast advertising networks will lead to higher investment due to desirable demographics

THEN

AUDIOBOOKS

Primarily consumed using analog methods like cassettes and CDs

NOW

AUDIOBOOKS

Companies like Audible experimenting with subscription-based models

SOON

AUDIOBOOKS

Digital distribution methods make audiobooks increasingly attractive for multi-tasked listening while commuting etc.

THEN

LIVE SPORTS

Games broadcasted primarily over AM/FM stations

NOW

LIVE SPORTS

tunein

TuneIn signing premium distribution deals with NFL, MLB Premier League, etc.

SOON

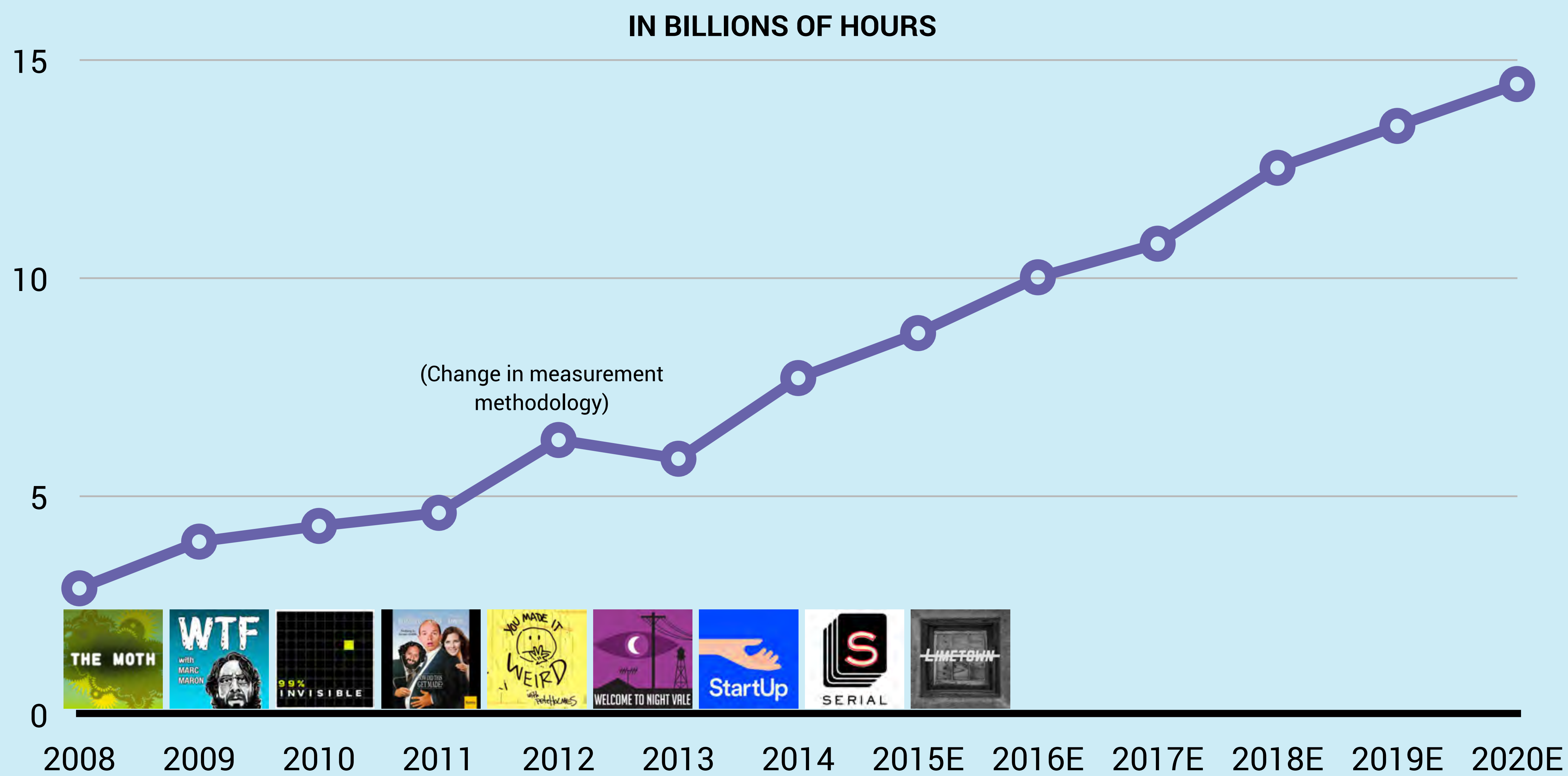
LIVE SPORTS

Increasing coverage of Wi-Fi and data networks will make digital distribution of live events more viable

Sources: Activate analysis

It's more than just music: Podcast are having their breakout moment as consumption explodes will continue to grow steadily

Activate Projections: Total Podcast Listening Time, U.S., 2008 - 2020E



Source: Pew Research, Edison Research, Activate analysis

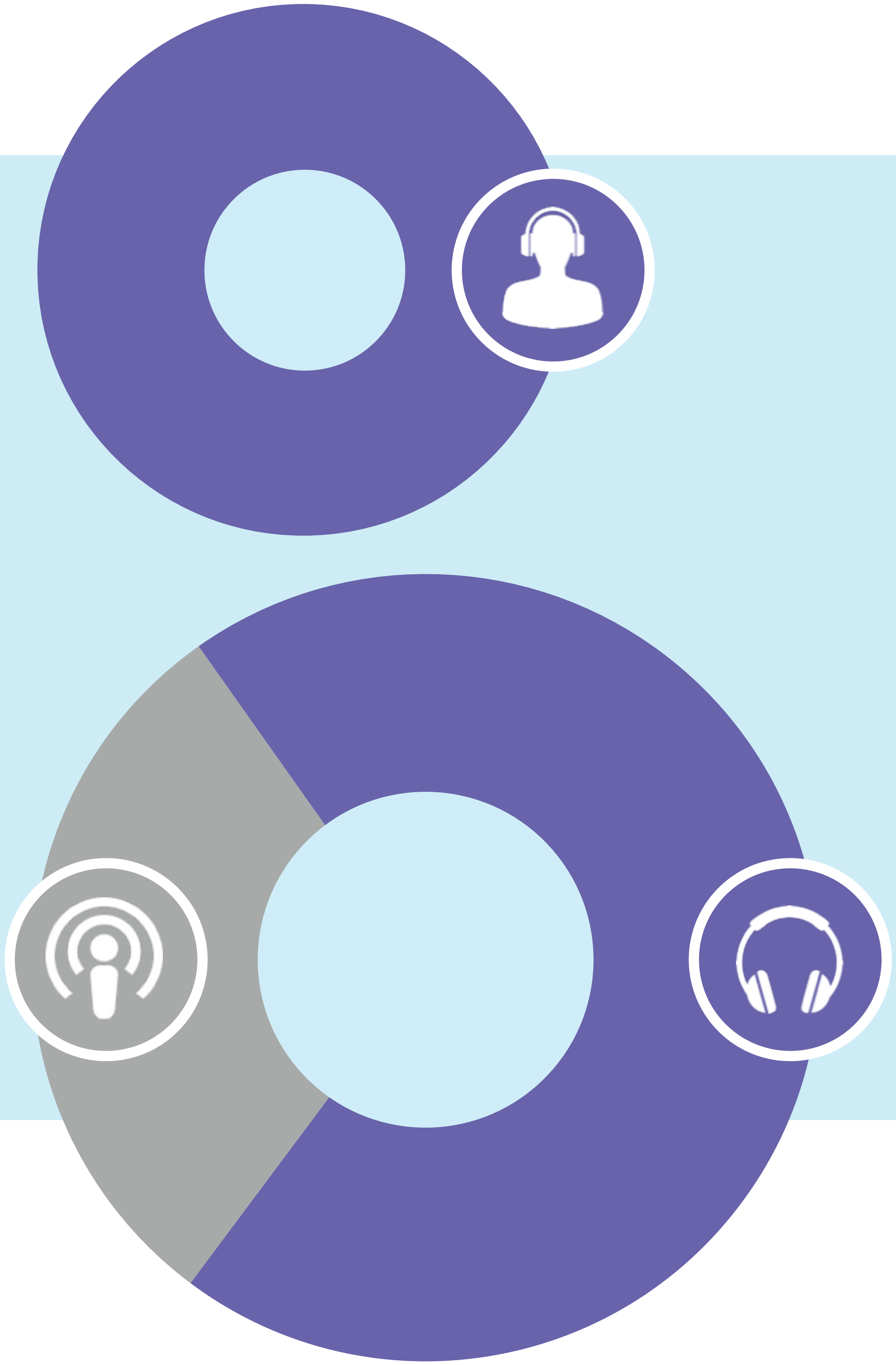
Podcast listeners are the elite of audio: they listen to more non-podcast audio than average, and are an attractive demographic

LISTENER DEMOGRAPHICS

	AVERAGE	PODCAST
Median Age	37	30
Age 18-34	0.3	0.67
Income Over $50K	0.27	0.62
Bachelor's Degree?	0.3	0.58

AVERAGE LISTENERS
4:05 hours/day

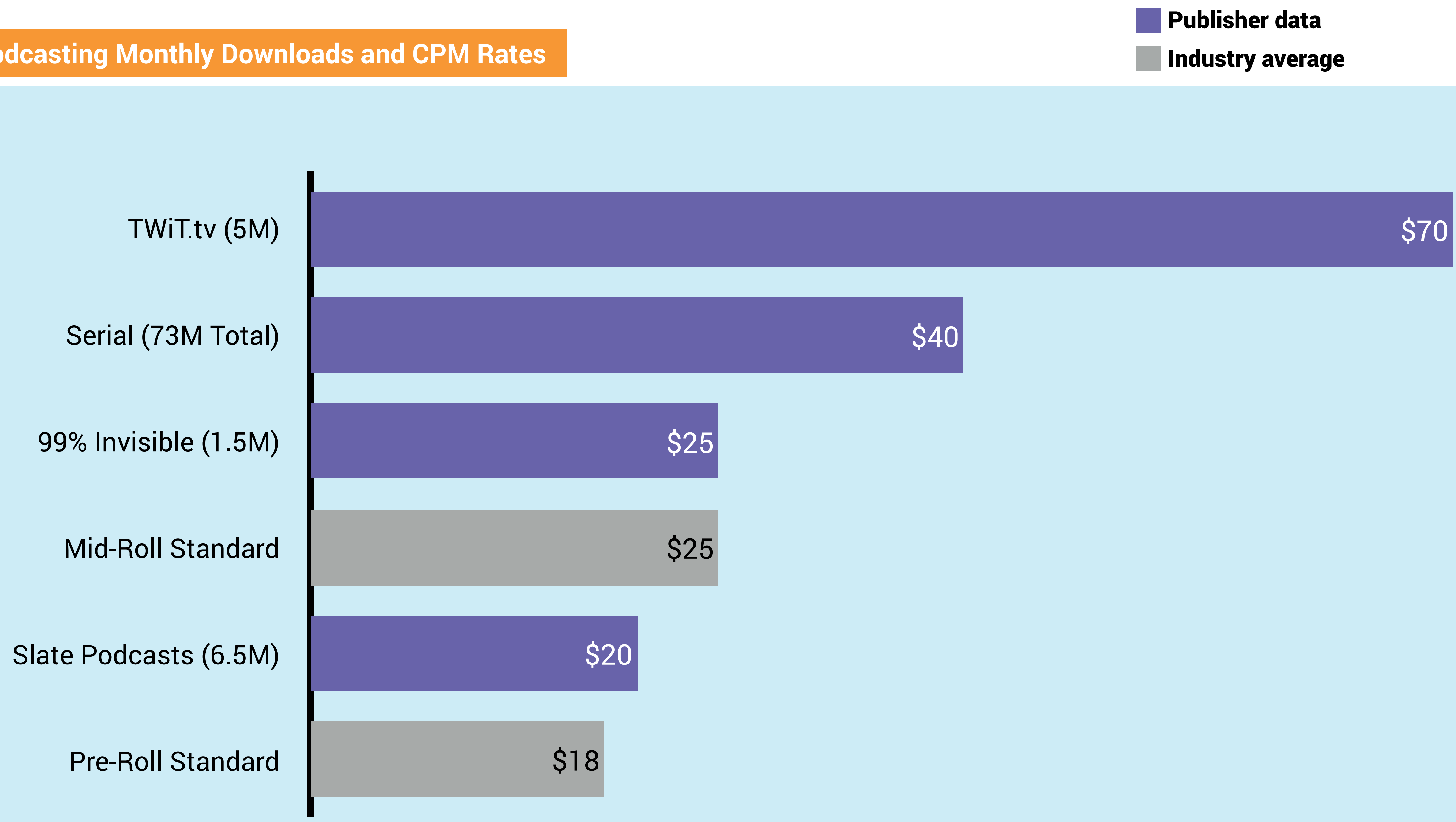
PODCAST LISTENERS
5:50 hours/day (4:19 non-podcast)



Sources: Midroll, IAB, US Census, Edison Research, Activate analysis

Early successes are showing podcast publishers can generate premium advertising rates

Podcasting Monthly Downloads and CPM Rates



Sources: Marketing.science, New York Magazine, Current, Ad Age, Activate analysis

There are enormous new opportunities in digital audio for adjacent, terrestrial and niche players

Digital listening minutes will increase

Players in adjacent markets (e.g. YouTube) will attempt to shift into pure audio

---

Podcasting becomes a web-scale, ad-supported industry; expect investment in podcasting advertising infrastructure and networks

---

High-engagement listening experiences may drive higher CPMs

Terrestrial players can tap growing digital audio ad dollars by migrating existing audiences to higher quality digital experiences

THE AVERAGE AMERICAN SPENDS MORE TIME ON TECH & MEDIA THAN WORK OR SLEEP

MESSAGING WILL BLOW PAST SOCIAL NETWORKS AS THE DOMINANT MEDIA ACTIVITY

THE NEXT BIG WINNERS IN STREAMING AUDIO ARE ALREADY (QUIETLY) HERE

THE LONG-AWAITED CORD CUTTING MOMENT IS STILL FAR OFF

THERE IS A "CABLE KILLER" COMING, BUT IT WON'T LOOK LIKE YOU EXPECT

E-SPORTS & WAGERING WILL CHANGE THE GAME IN GAMING

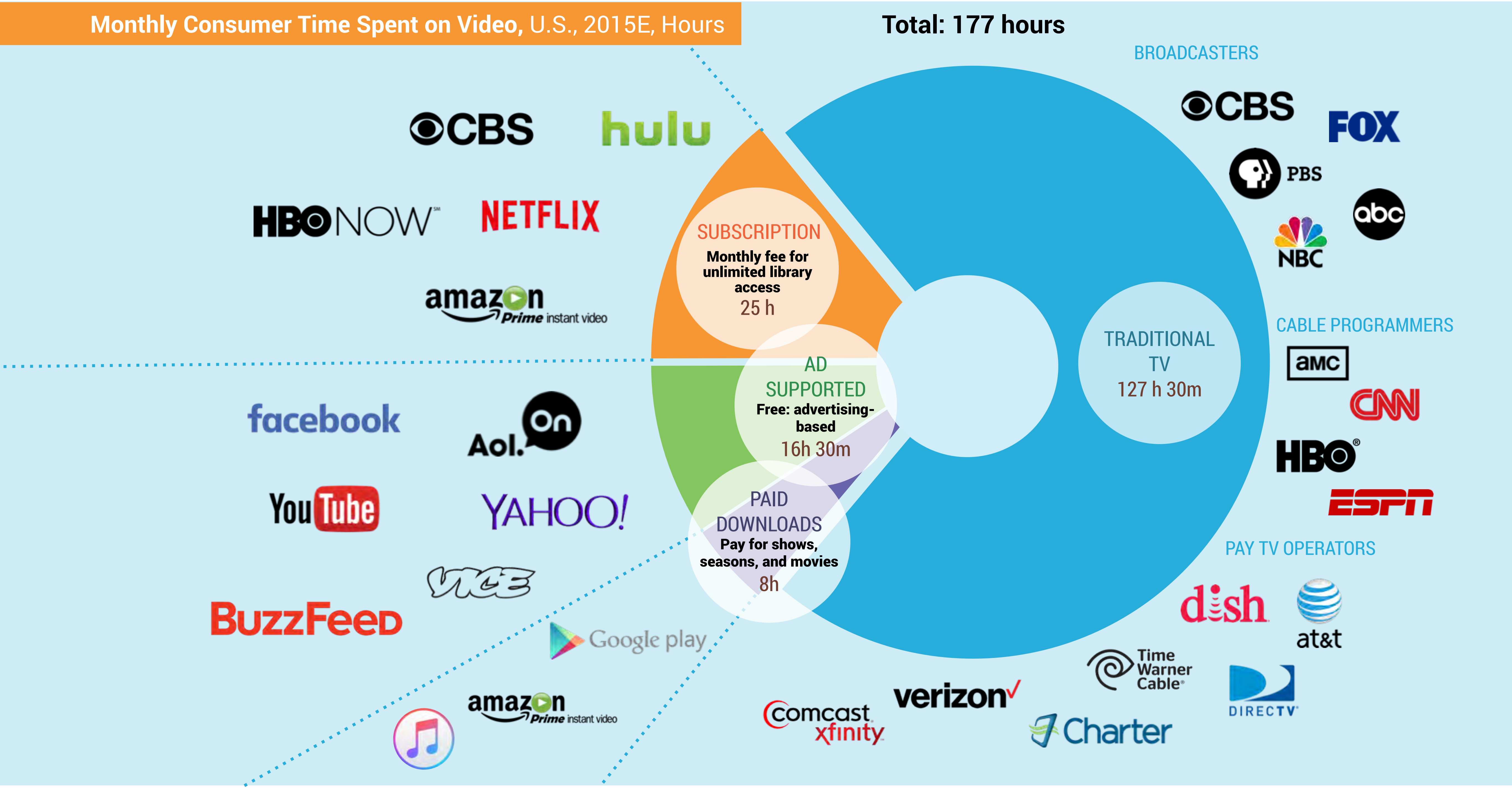
GOOD LUCK GETTING RICH IN THE APP STORE!

THESE COMPANIES ARE GRABBING ALL THE MONEY IN CONSUMER TECH & MEDIA

ONE SIMPLE WAY TO PREDICT WHAT TECH & MEDIA PLAYERS WILL DO NEXT TO COMPETE

An increasingly large number of players are competing for consumers' video time and attention, with traditional TV still capturing 72% of all viewing

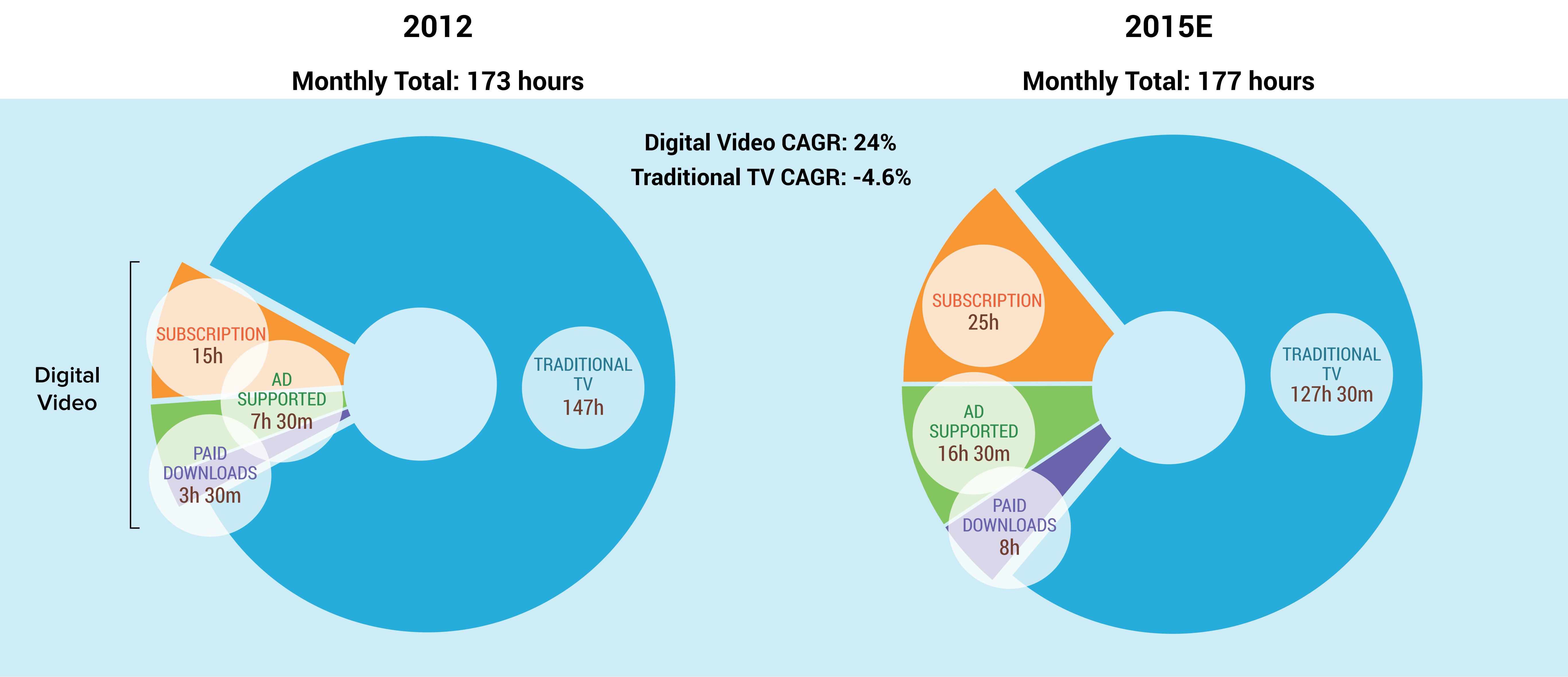
Monthly Consumer Time Spent on Video, U.S., 2015E, Hours



Sources: Digitalsmiths, eMarketer, GfK, Sandvine, Nielsen, TDG, Activate analysis

What's at stake in video? Nearly **six hours a day** of viewing time, making video the single most popular media activity

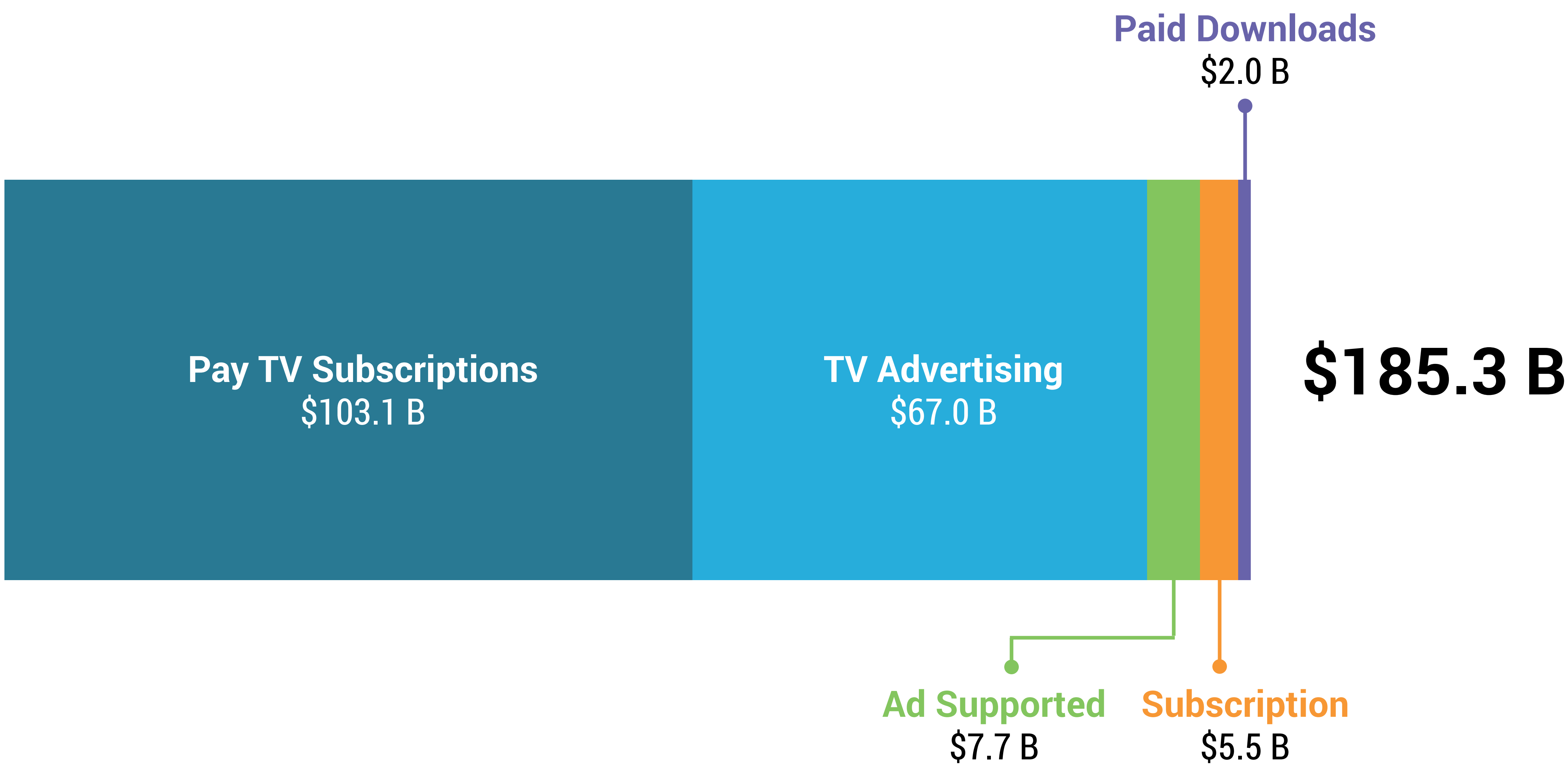
Monthly Consumer Time Spent on Video Among 2+ Users, U.S., 2012-2015E, Hours



Sources: Digitalsmiths, eMarketer, GfK, Sandvine, Nielsen, TDG, Activate analysis

U.S. video revenues are enormous—$185 Billion, and the largest share is still pay TV subscriptions

Revenues, U.S., 2015E, USD billions



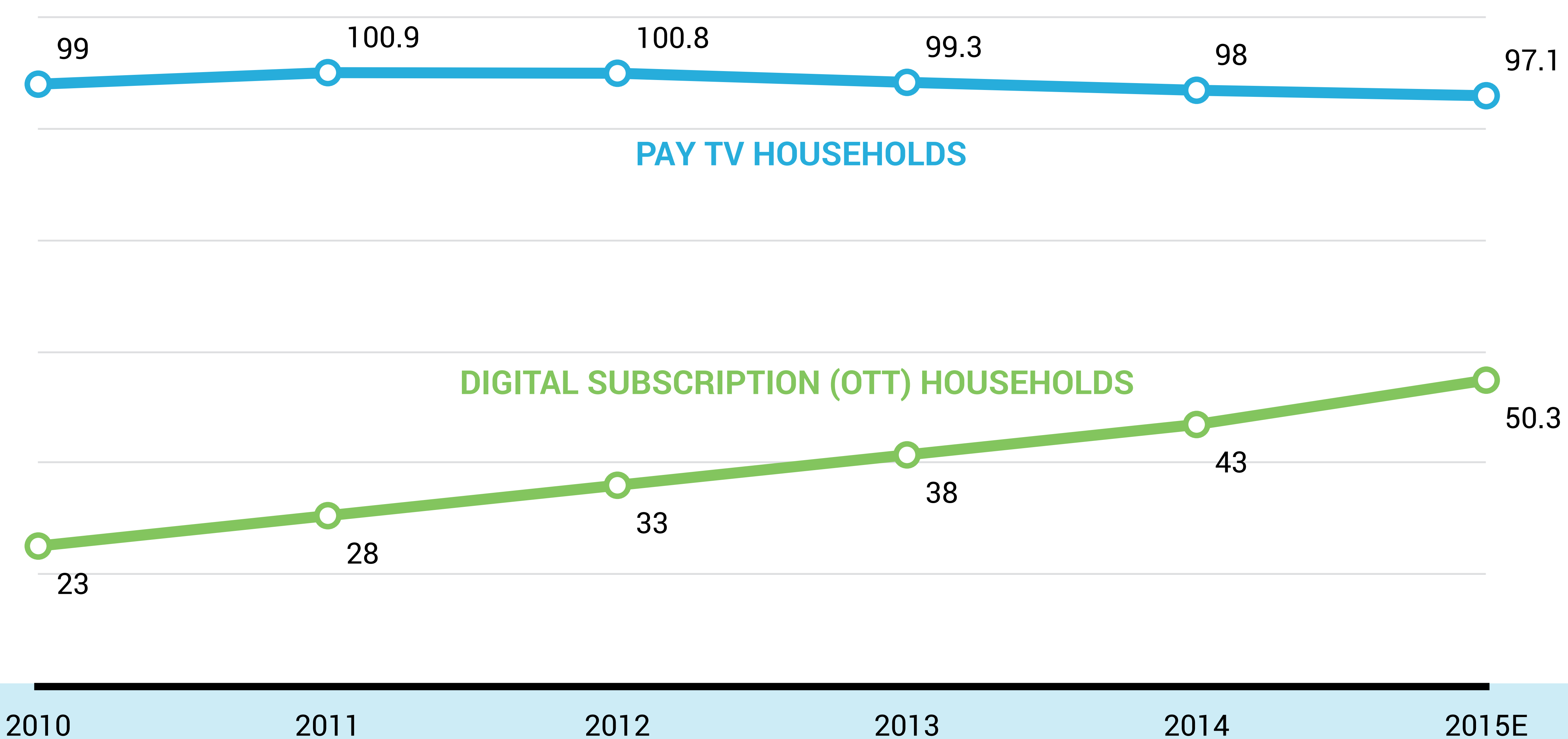
Sources: BIA/Kelsey, Digital TV Research, eMarketer, Google, Hulu, Netflix, PWC, SNL Kagan, Statista Digital Market Outlook, TDG, Activate analysis

SO, IS IT TRUE THAT "THE FUTURE OF TV IS APPS"?

YES, BUT THAT PHRASE DOESN'T MEAN EVERYBODY WILL CUT THE CORD. IT MEANS THAT APPS WILL DEFINE THE EXPERIENCE, BUT WON'T DECIDE WHO GETS PAID FOR TV AND VIDEO.

We appear to have hit "peak cable," with pay TV providers shedding subscribers while digital subscription (OTT) services gain ground

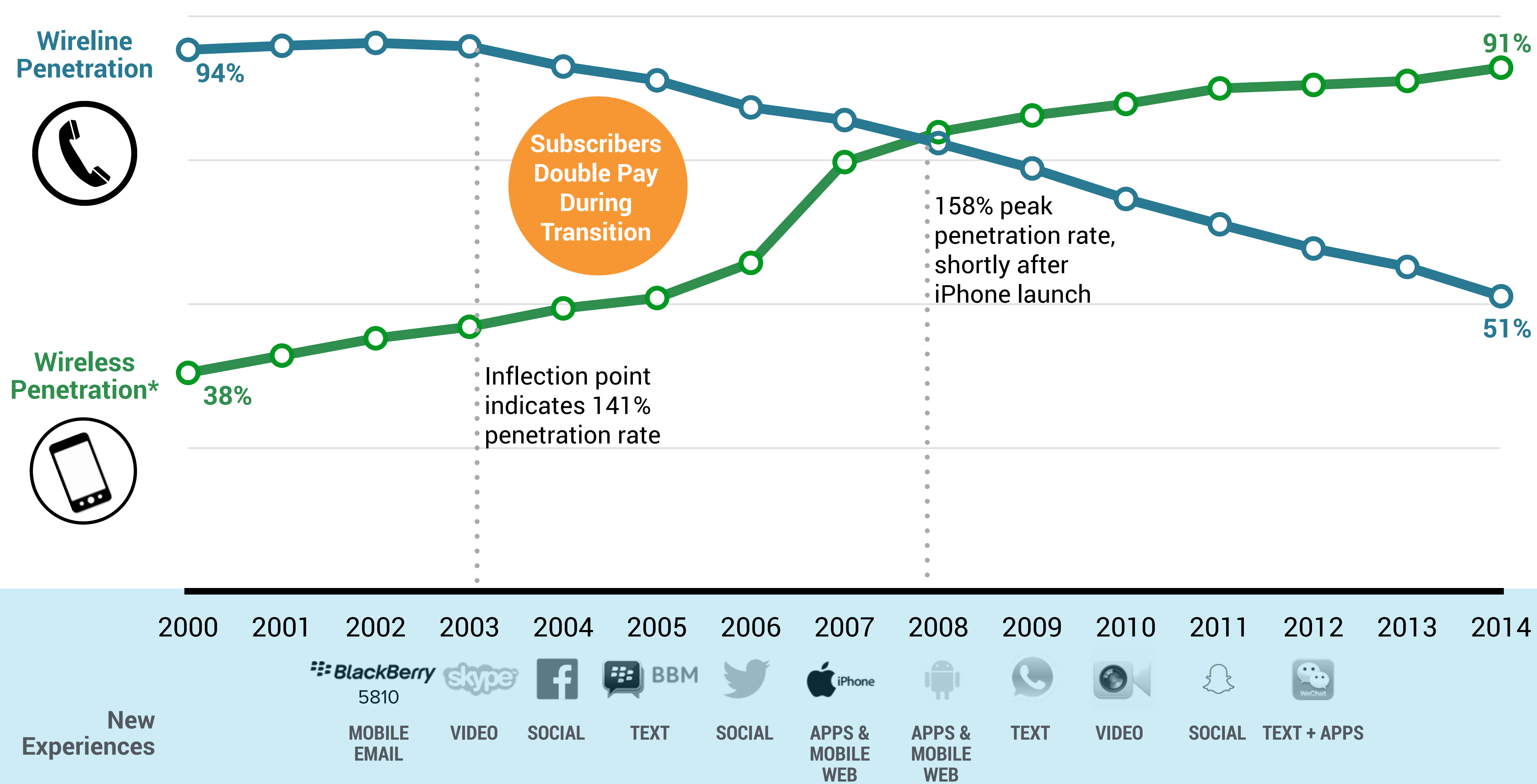
Households with Pay TV vs. Subscription OTT, U.S., 2010-2015E, Millions



Sources: Leichtman Research Group, U.S. Census Bureau, Activate analysis

A major platform transition, such as cutting the cord for telephones, can take more than a decade to play out

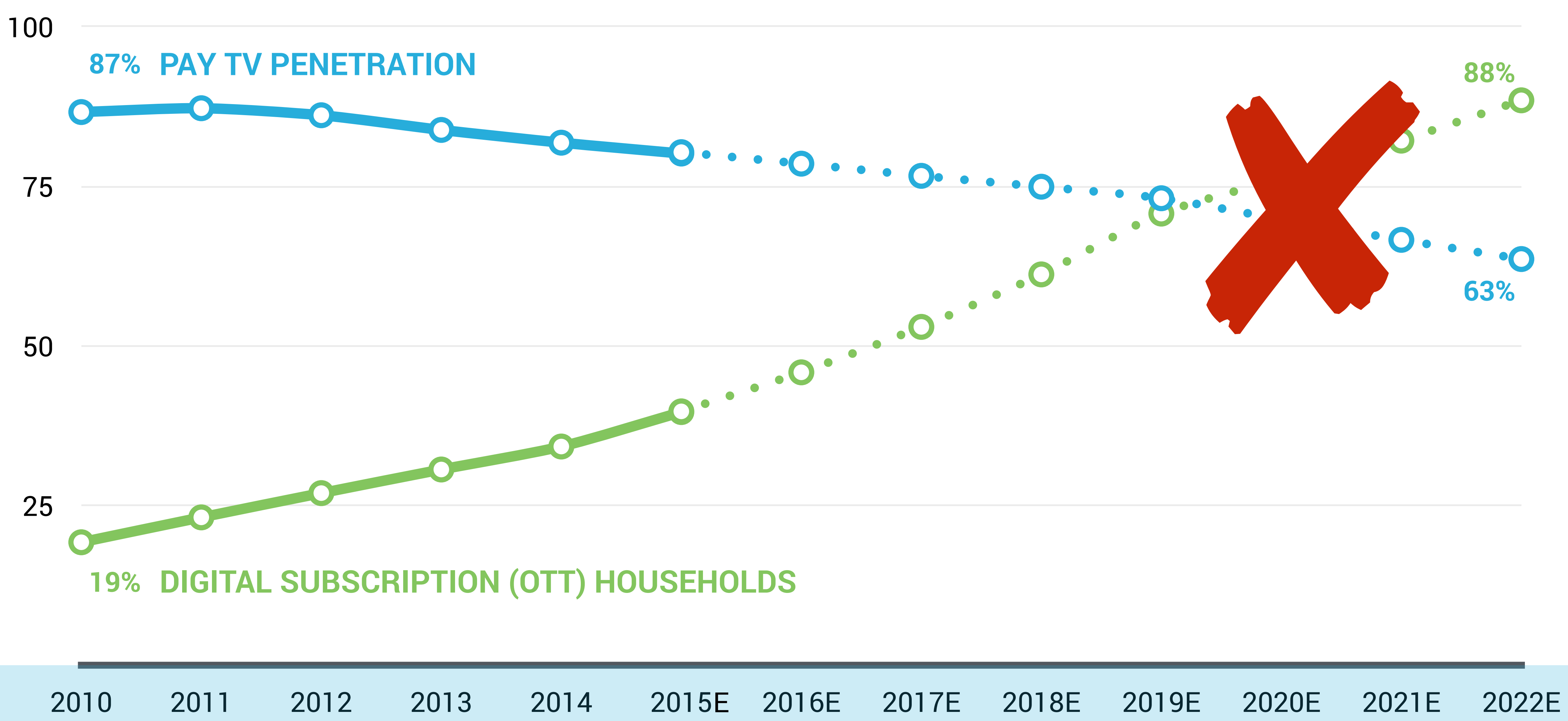
Wireline vs. Wireless Household Penetration, U.S., 2000-2014, % of Households



Sources: CDC, CTIA, FCC, Gartner, Interviews, SNL Kagan, Activate analysis. Does not include data-only connections.

If television cable cutting followed the same pattern as telephones, the crossover would happen in 2019—but this isn't likely

Extrapolated Pay TV and Subscription OTT Household Penetration Rates, U.S., 2010-2022E, % of Households



Sources: U.S. Census, TDG Research, Leichtman Research Group, Activate analysis. OTT penetration only includes paid online services, not web video.

THE PAY TV TRANSITION IS DIFFERENT

CHANGES IN THE TV MARKET ARE NOT JUST A SIMPLE TECHNOLOGY TRANSITION. CORD CUTTING WON'T HAPPEN OVERNIGHT.

Four reasons why cord cutting on TV won't look like a typical tech transition

USERS:
People are still hooked on traditional TV and are consuming more video overall (Pay TV + OTT)

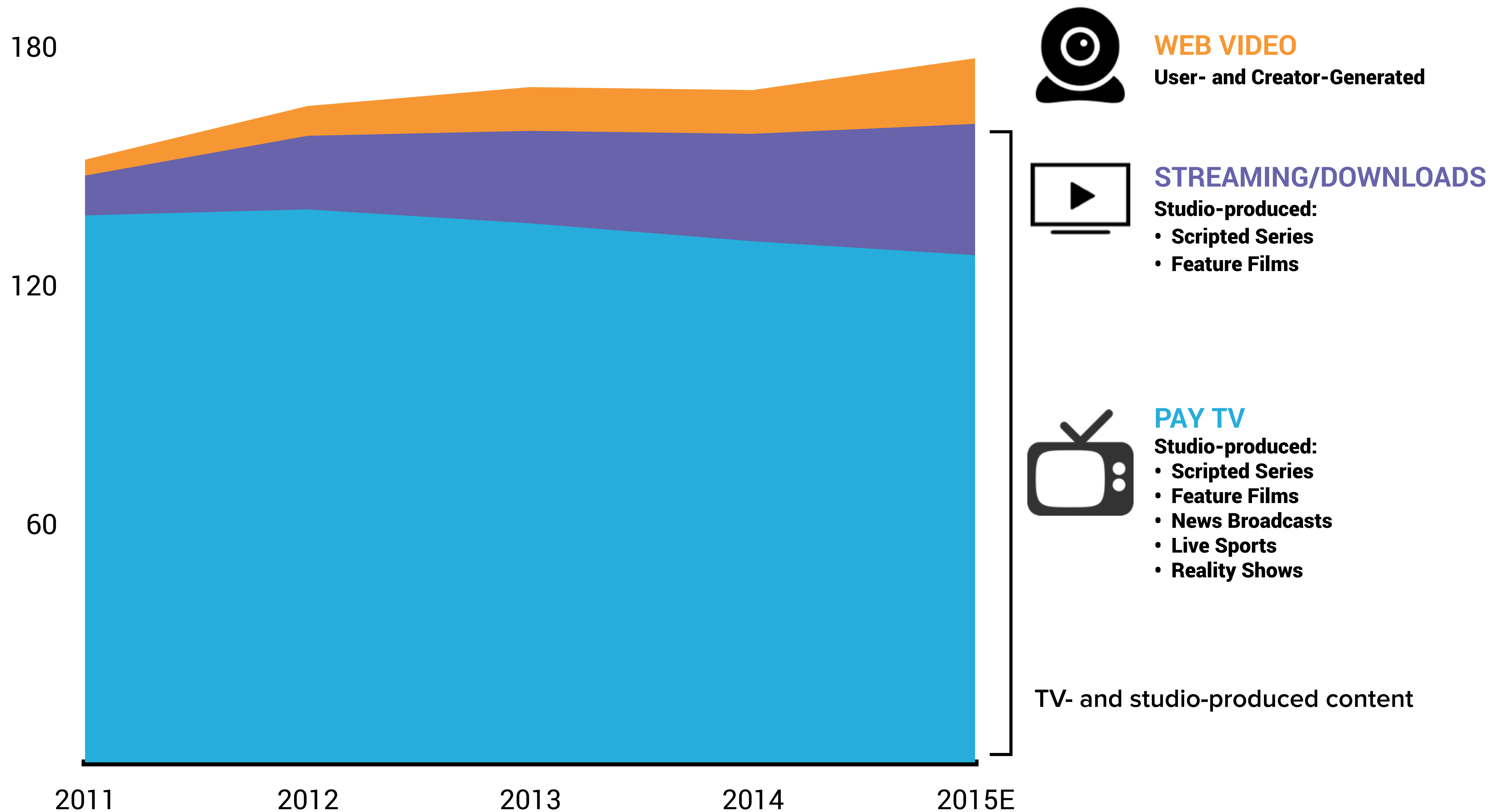
CONTENT:
A significant amount of popular content is still exclusive to pay TV (e.g. sports)

PRICING:
People can't cobble together the content they want for a lower price than a pay TV package

EXPERIENCE:
Today, traditional pay TV still wins for simplicity and reliability. Digital offers more power, control and discoverability, but also more complexity

People are still spending most of their time with TV- and studio-produced content

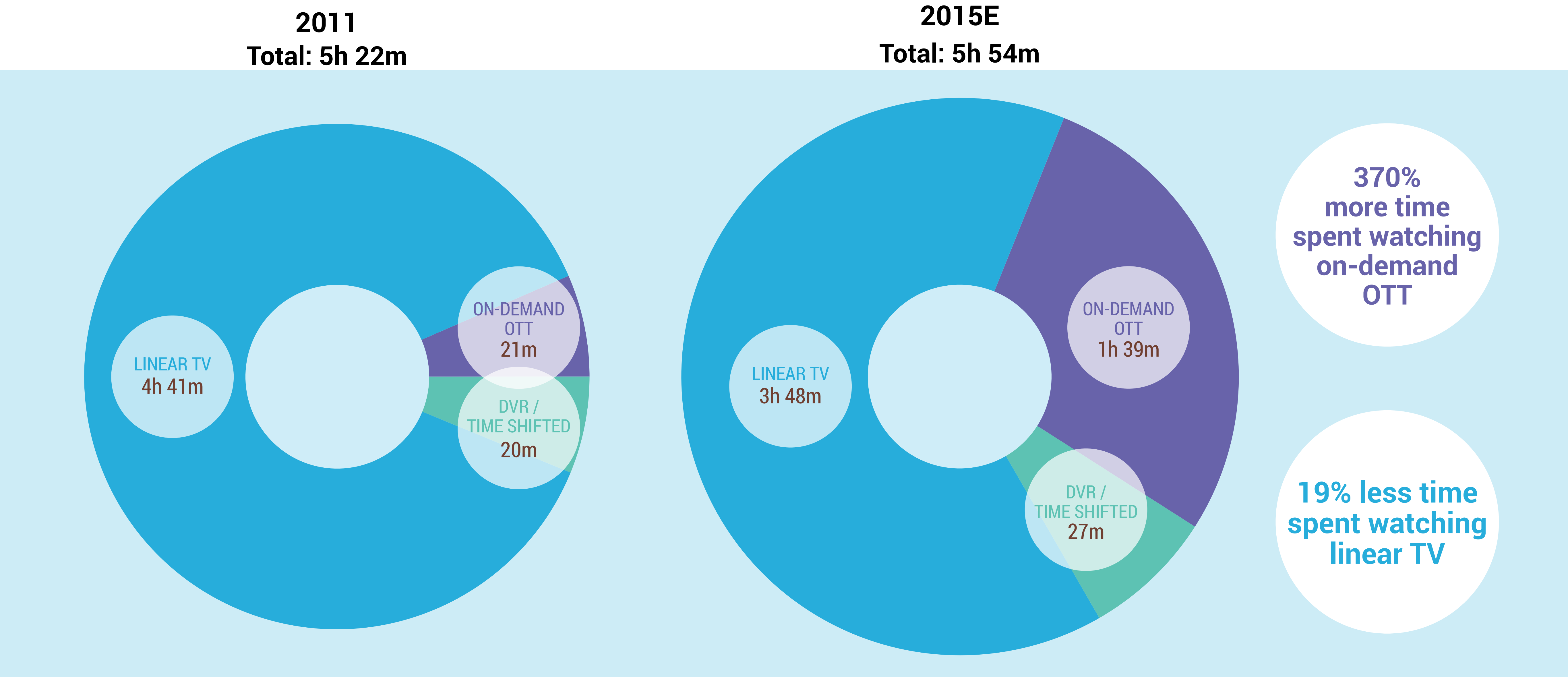
Monthly Video Consumption, U.S., 2011-2015E, Hours



Sources: Digitalsmiths, eMarketer, GfK, Sandvine, Nielsen, TDG, Activate analysis

On-demand and time-shifted viewing is growing quickly, as viewers watch more and more TV on digital platforms

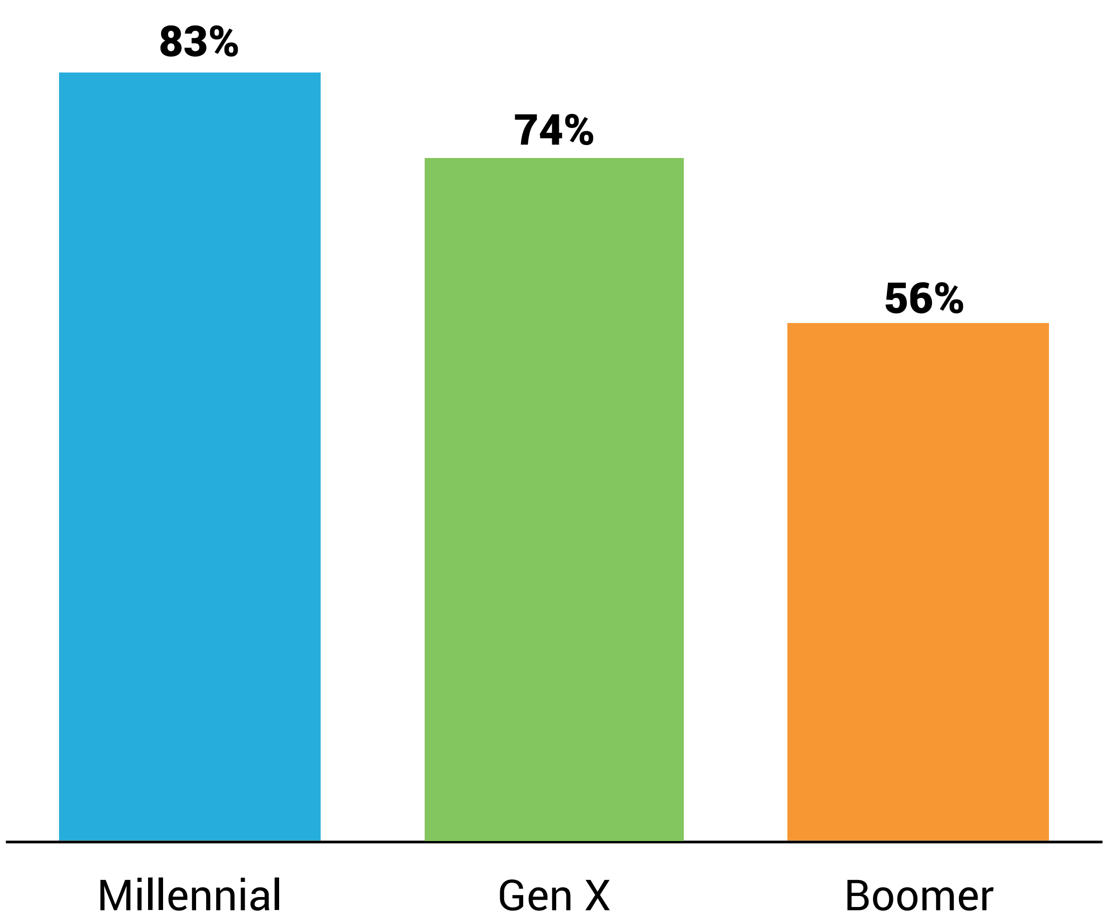
Daily Time Spent on Linear TV vs. Video On-Demand Among 2+ Users, U.S., 2011-2015E, Hours : Minutes



Sources: Nielsen's 2015 Total Audience Report and 2011 Cross-Platform Report, Sandvine, WSJ, Financial Times, The Guardian, Automated Insights, Activate analysis. Video on-demand includes multimedia devices, video watched on PC, video watched on mobile. Average of all age brackets 2+.

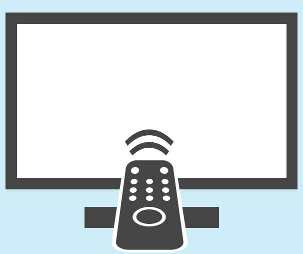
Most Americans now binge watch TV, and this behavior is amplifying time-shifted viewing

PERCENTAGE OF PEOPLE WHO BINGE WATCH BY AGE GROUP

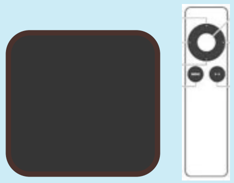


PREFERRED PLATFORM FOR BINGE WATCHING* (ACROSS ALL AGE GROUPS)

60%
Computer
(Desktop/Laptop)



37%
Pay TV
(On-Demand)



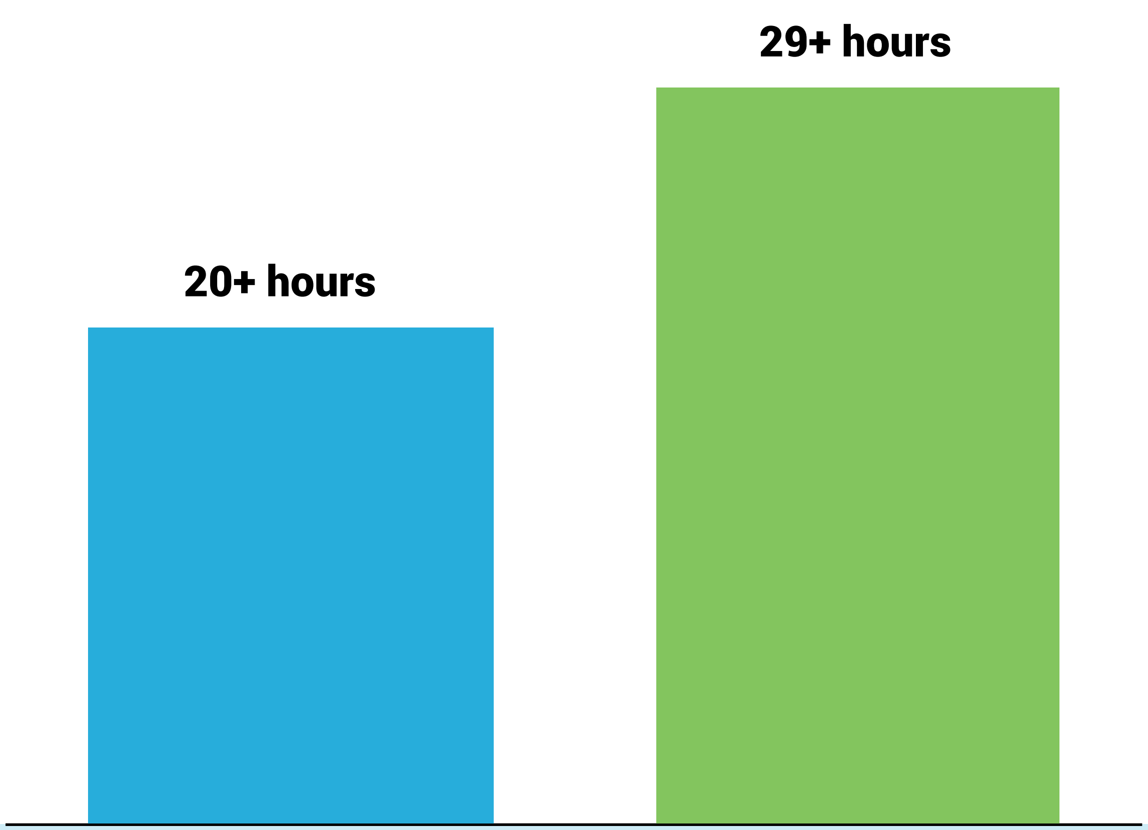
37%
Streaming Device

Sources: Conviva, Deloitte, Activate analysis. Adds to more than 100% due to multiple preferred platforms. *"Binge watching" defined as viewing three or more TV episodes in one sitting.

Millennials still watch more than 20 hours per week of television while consuming more video overall than any other group

Average Weekly Time, U.S., 2015E, Hours

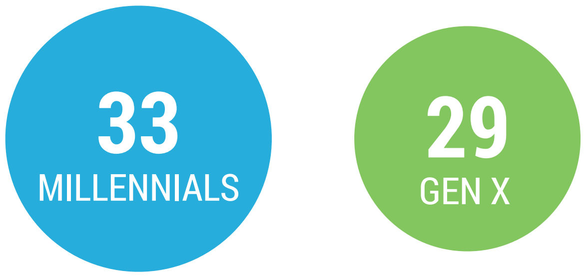
TV VIEWING



	Millennials	Gen X
Population Size:	**71 million**	**64 million**

ALL VIDEO VIEWING

Hours of video among Pay TV subscribers

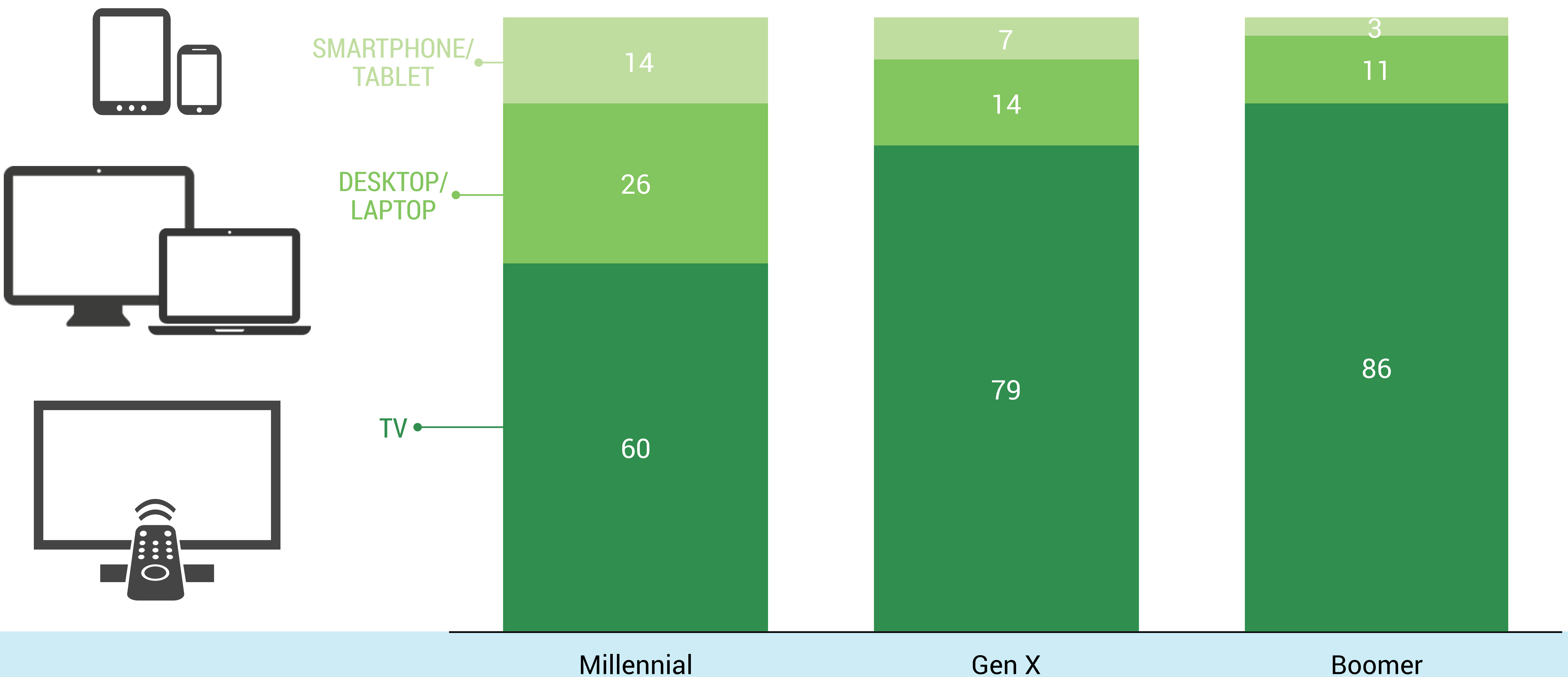


Hours of TV/video among cord cutters

Sources: Deloitte, Ericsson ConsumerLab, Nielsen, Activate analysis

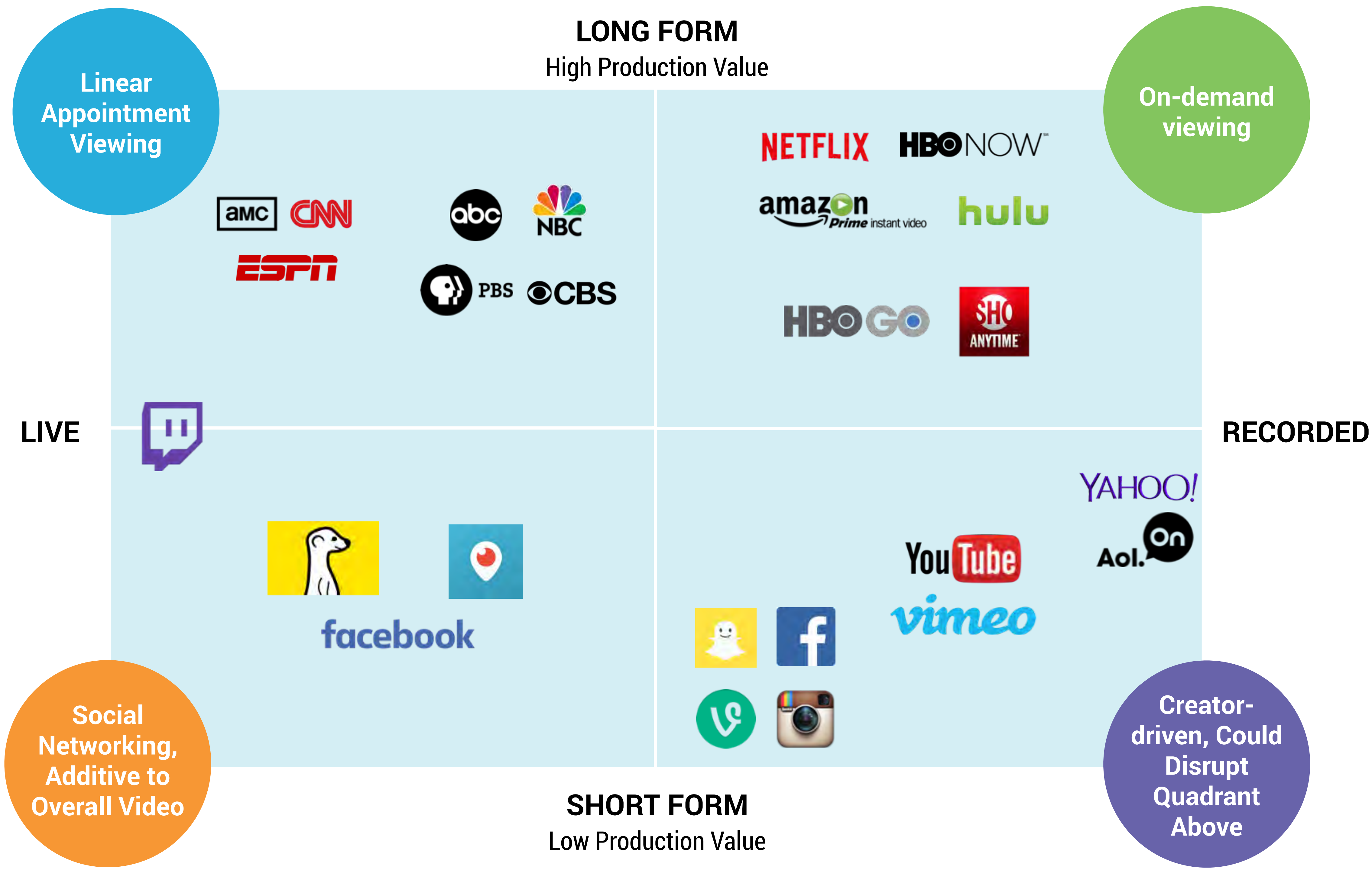
All adult age groups, including Millennials, like to watch high-quality video on large screens

Device Preferences for Watching TV Series, U.S., 2015E, Percent



Sources: ComScore, Deloitte, Verizon Digital Media Services, Activate analysis

Consumer behavior has moved beyond traditional appointment viewing and has created audiences for new kinds of content



Source: Activate analysis

Pay TV still holds the reins on the ultimate appointment viewing: live sports, where synchronous viewership is the norm

- Fragmentation of rights among local and national networks makes it challenging to offer comprehensive sports packages at price points lower than Pay TV
- Sports networks are also subsidized by the bundle, which will limit in-market OTT offerings for the foreseeable future

PERCENTAGE OF LIVE GAMES*

	National Broadcast	National Pay	Local Pay**	Pay Channels Required	Live OTT?
NFL	0.95	0.05	-	4	Out of market
NBA	3% + Finals	10% + Playoffs	0.87	5	Out of market
MAJOR LEAGUE BASEBALL	.05% + Finals	5% + Playoffs	0.94	5	Out of market
NHL	Stanley Cup Only	7% + Playoffs	0.93	2	Out of market
NCAA	16% + Bowls	84% + Bowls/Playoff	–	2-7	N/A

*Percentages refer to regular season games only
**Most markets; some smaller markets have select games on broadcast
Sources: Deadspin, NBA, NFL, MLB, NHL, ESPN, Activate analysis. NCAA refers to football only; live post season games not available OTT (authenticated only).

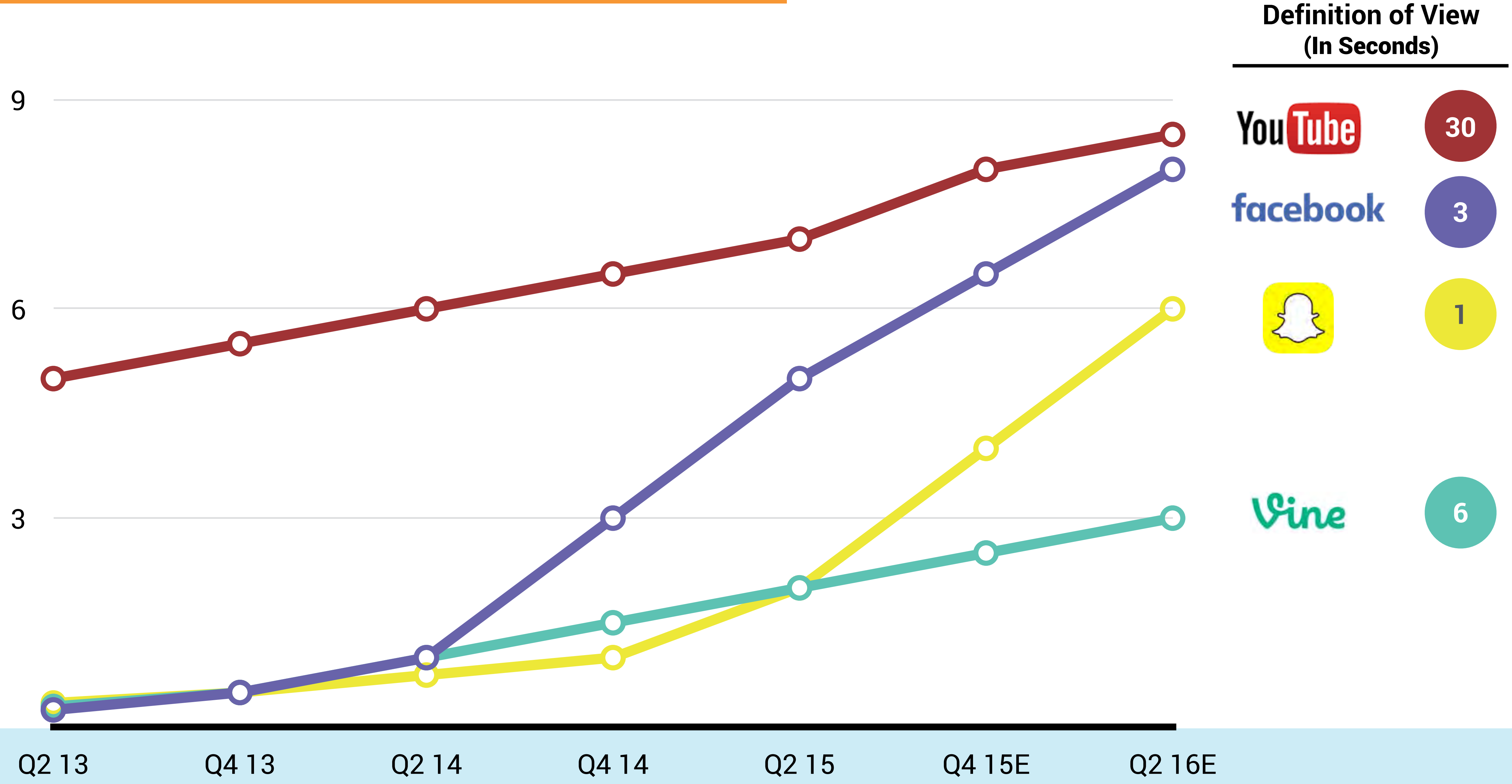
While some premium channels offer over the top subscriptions, much of the most popular cable programming is still exclusive to pay TV

	HBO	SHOWTIME	Cable Programming		Sports
Current Season OTT Availability	HBO NOW	SHO	**Not Available**		**Not Available****
	Game of Thrones	Homeland	The Walking Dead	American Pickers	Sunday Night Football
	Hard Knocks: Training Camp with the Houston Texans	Ray Donovan	American Horror Story	Duck Dynasty	Thursday Night Football
	Ballers	Penny Dreadful	Gold Rush	Pawn Stars	Monday Night Football
	Silicon Valley	Masters of Sex	Mr. Robot	Fargo	NCAA
	Veep	Nurse Jackie	Keeping up with the Kardashians	The Librarians	BCS Bowl Championship Series

*National broadcast and inclusion of select local affiliates
**Availability on mobile through NFL Mobile on Verizon, and DirecTV Sunday Ticket where DirecTV is unavailable
Sources: HBO, Nielsen, Showtime

Web video distribution is booming, with some new entrants rivaling YouTube in video views, even though not all "views" are the same

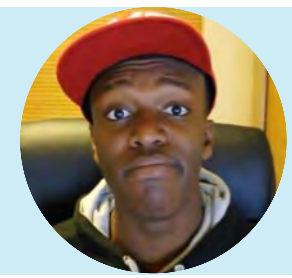
Number of Video Views Per Day, U.S., Q2 2013-2016E, Billions



Sources: Bloomberg, Company data, comScore, Forbes, SNL Kagan, Socialbakers, Tubular Labs, Activate analysis

Web video is driven by native creators producing short content that reaches a massive audience and grows overall video consumption






	YouTube	Vine	Vine	YouTube	YouTube
	PewDiePie	**Lele Pons**	**King Bach**	**KSI**	**Evan Tube HD**
GENRE	Gaming	Comedy	Comedy	Gaming	Reviews
TOTAL VIEWS (BILLIONS)	10 B	7 B	3 B	2.4 B	1.6 B
TOTAL FOLLOWERS (MILLIONS)	40 M	9.5 M	14 M	11 M	2 M
MCN	MAKER	FULLSCREEN	FULLSCREEN	POLARIS	MAKER

Sources: YouTube, DigiDay, Variety, SocialBlade, Activate analysis. Views per video estimates based on content creator's main channel, while total view estimates include subsidiary channels

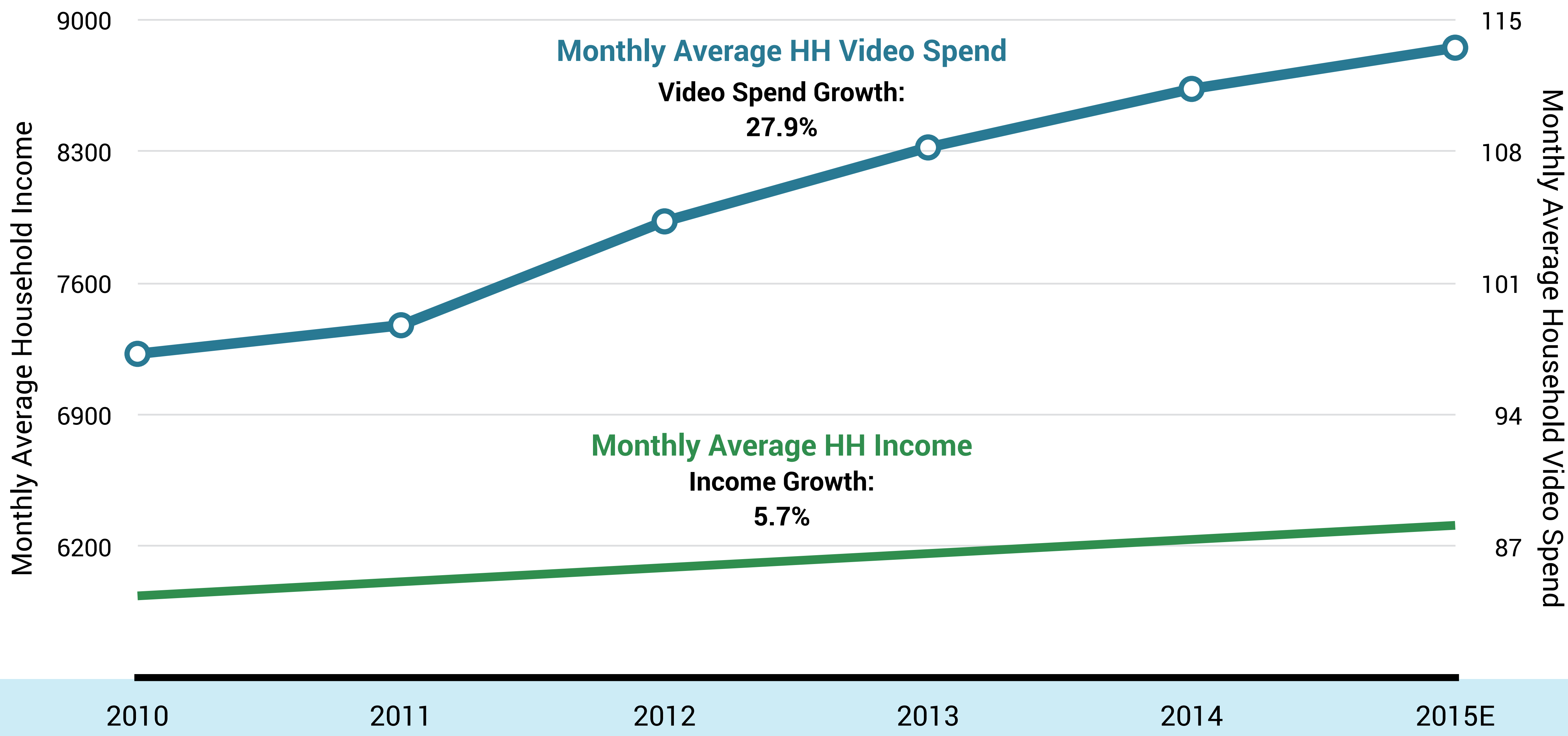
Digital media companies are investing in originals but haven't had a hit yet - they lag behind web creators and studio shows

Media Company	Content Distribution Strategies	
Aol. On	**Free, ad-supported video blending original content with 3rd party partners** • Available videos range from short news clips to full-length films • Offering includes 12 originally produced TV series	
YAHOO! SCREEN	**On-demand streaming service for TV shows, movies, and webisodes** • Screen has 26 channels, which includes original episodes of Community • Upcoming slate of original programming will bring total to 55 video series	
BuzzFeed	**Widely distributed short-form original videos targeted at millennials** • Library includes 10 original series and over 700 original short videos • Distribution includes a YouTube Channel with 7.8M subscribers	

Sources: AOL, Yahoo, BuzzFeed Company Websites, Activate analysis

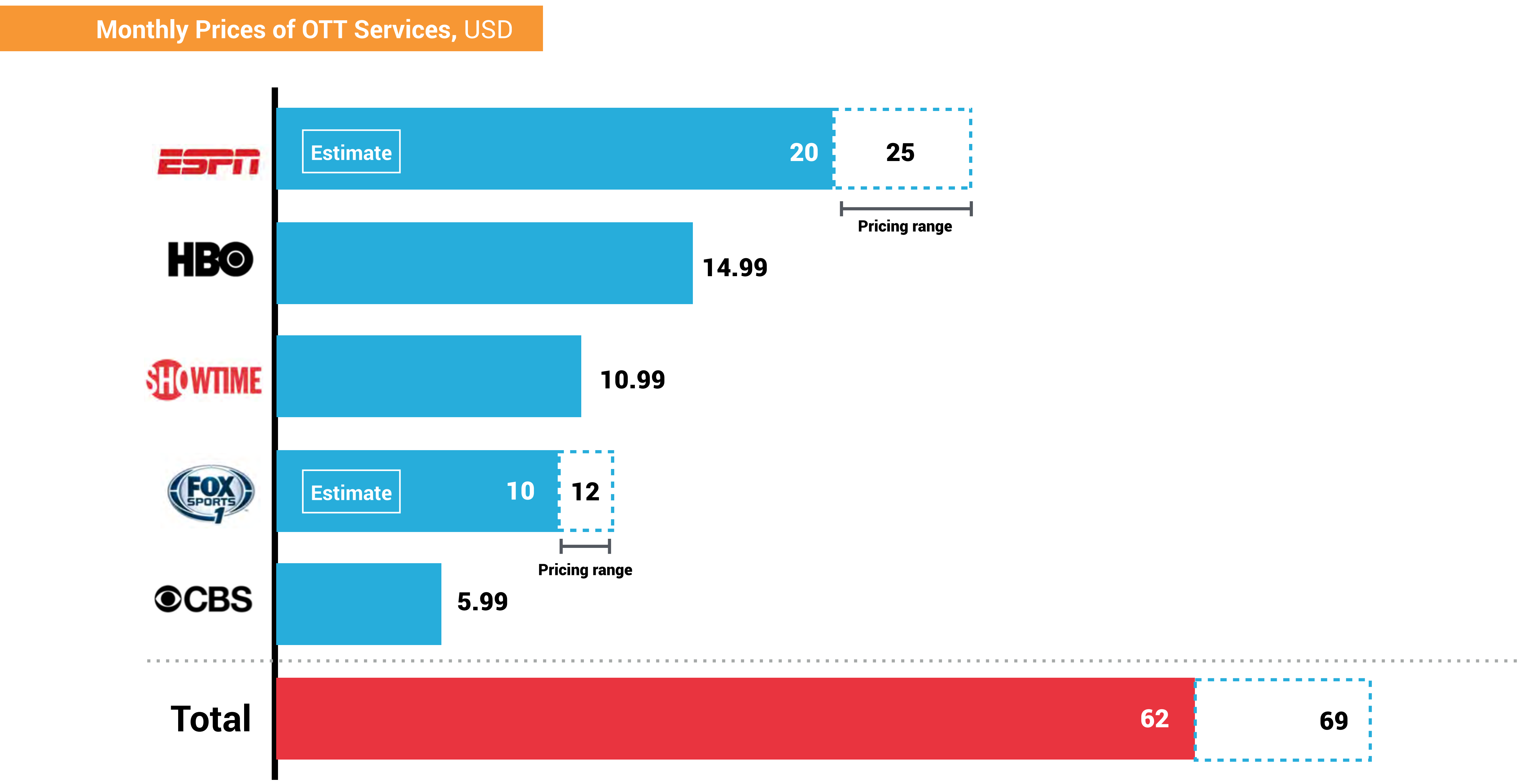
Consumer spend on video is **growing faster than income**, which could put pressure on Pay TV pricing

Average Video Spend vs. Income, U.S., 2012-2015E, USD



Sources: PWC, Digital TV Research, U.S. Census Bureau, Activate analysis. Monthly Average HH Income represented with linear best-fit line.

As more OTT services come online, the value of the bundle becomes more apparent

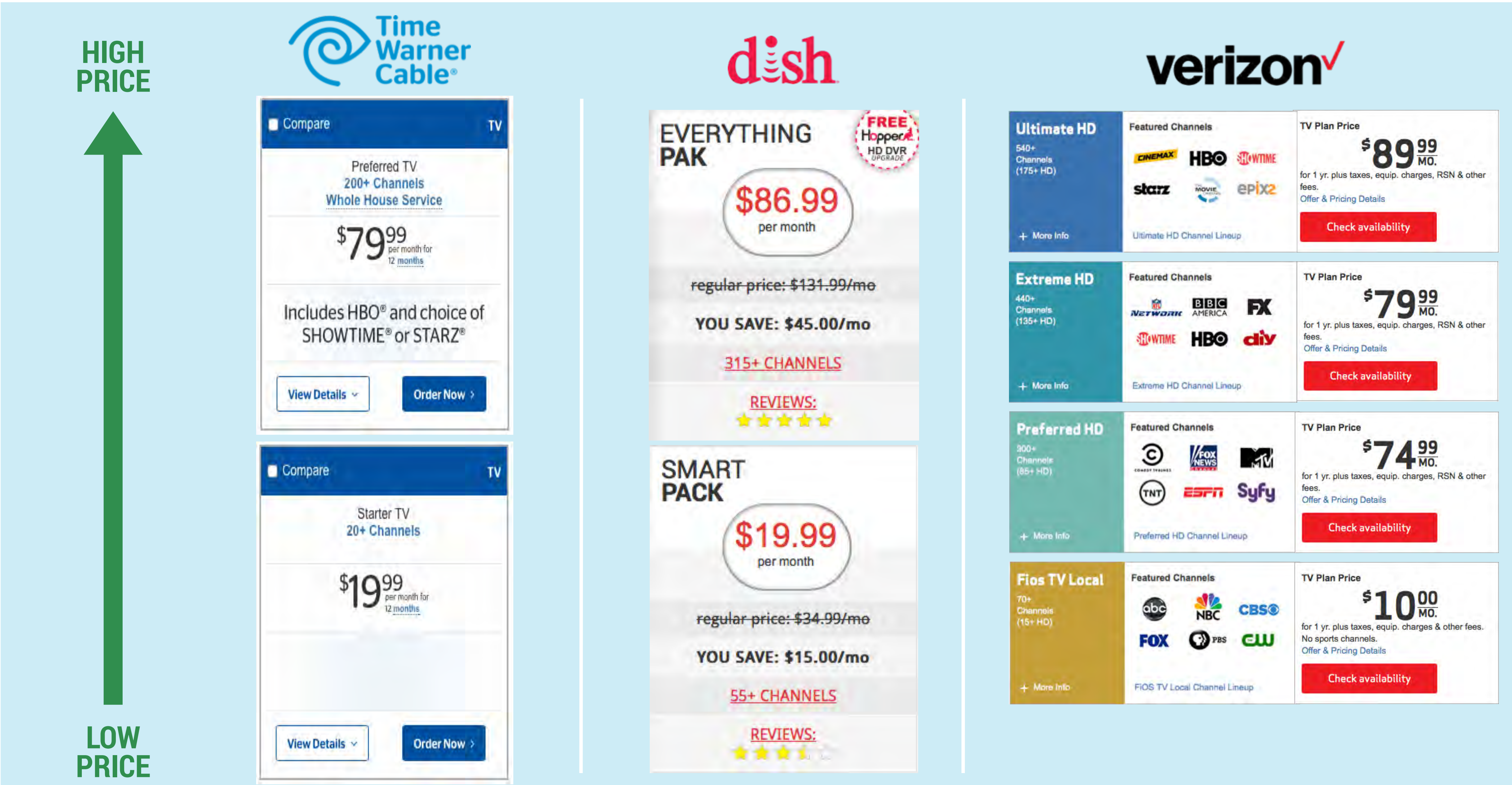


Sources: CBS, CNBC, Federal Communications Commission, HBO, Hulu, Interviews, Netflix, Showtime, SNL Kagan, Activate analysis

Even if an OTT offering can be competitively priced, Pay TV operators have flexibility to vary pricing and packaging

Video Pricing Examples from Select Providers, U.S., 2015E, USD

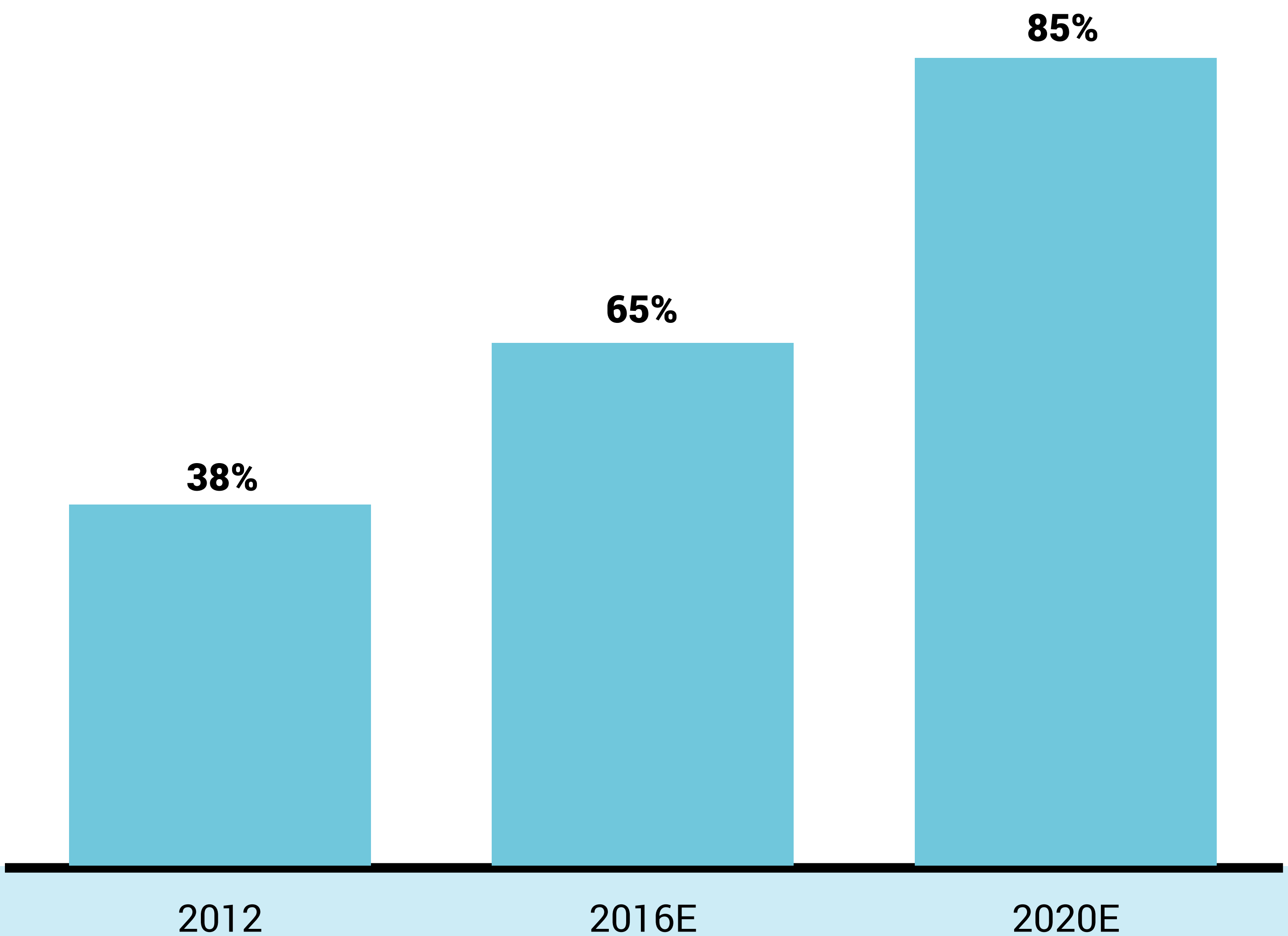
TRADITIONAL PAY TV



Sources: Provider Offers as of October 16, 2015 as presented on Company Websites

More streaming devices are enabling homes to view digital streaming as well as TV Everywhere on large screens

Internet-connected TV Penetration, U.S., 2012-2020E, % of Households

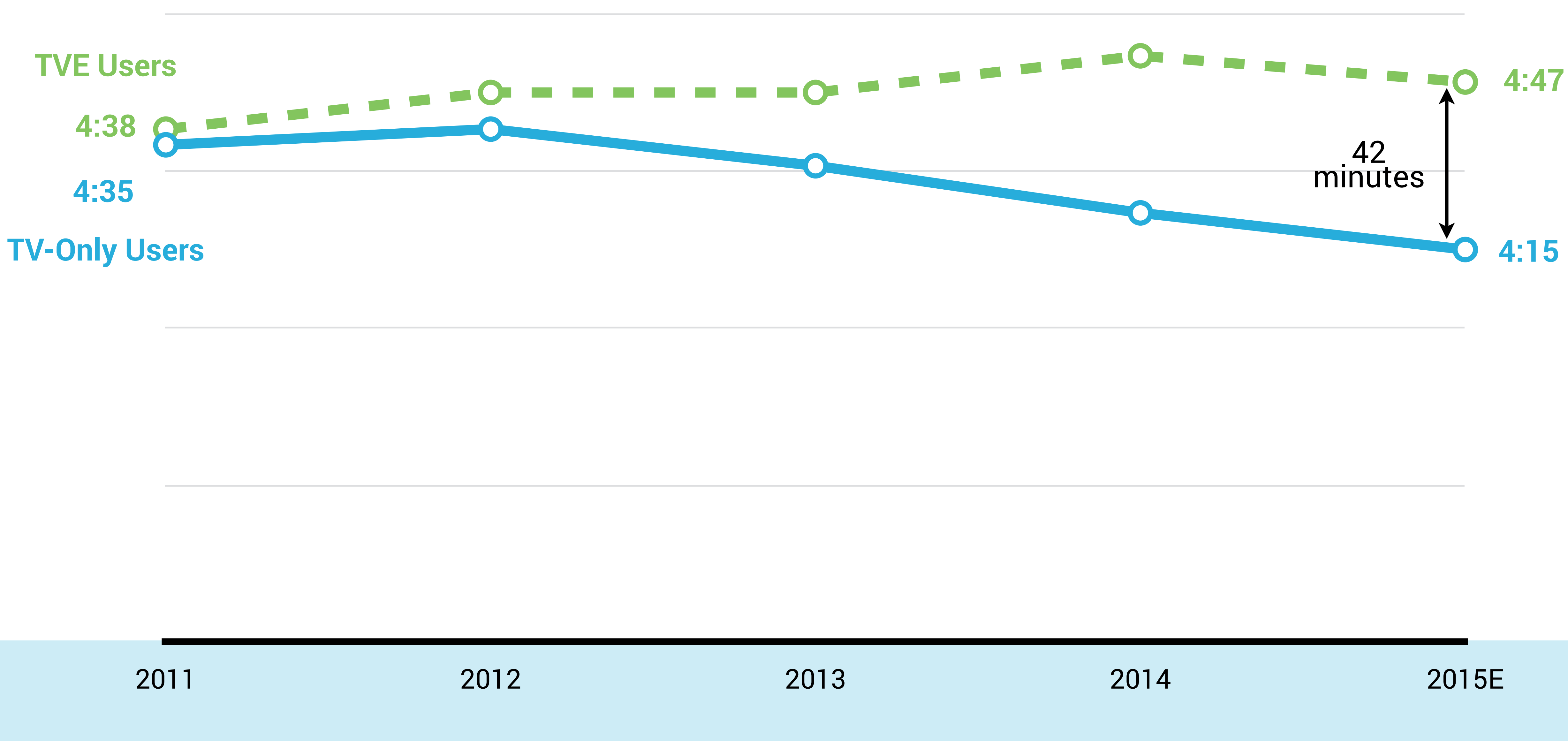


Share of TVE usage on connected devices grew 110% from Q2'14 to Q2'15

Sources: Business Insider Intelligence Unit, eMarketer, Leichtman Research Group, TDG, NPD, Activate analysis

TV consumption holds steady, or even increases, in the 13% of households that use TV Everywhere, rather than seeing a decline

Daily Television Consumption Among TVE Users vs. TV-Only Users, Hours : Minutes



Sources: Adobe Digital Index, eMarketer, comScore, Nielsen, Viacom, Activate analysis

THIS IS PAY TV'S GAME TO LOSE

FOR A CONSUMER, BUILDING YOUR OWN CORD CUTTING BUNDLE IS EXPENSIVE AND INCOMPLETE. CABLE COMPANIES CAN MOUNT A STRONG DEFENSE. THEY'LL HAVE TO KEEP INNOVATING AND STAY NIMBLE, BUT THEY CAN SLOW DOWN THE THREAT OF CORD CUTTING.

What will it take for Pay TV to stay competitive against challengers?

An intuitive and user-friendly experience across platforms

Integrated search capabilities across video providers, regardless of source

Smarter discovery capability, modernizing the set top experience

A deep content library

Enhanced tools for time-shifted and offline viewing

THE AVERAGE AMERICAN SPENDS MORE TIME ON TECH & MEDIA THAN WORK OR SLEEP

MESSAGING WILL BLOW PAST SOCIAL NETWORKS AS THE DOMINANT MEDIA ACTIVITY

THE NEXT BIG WINNERS IN STREAMING AUDIO ARE ALREADY (QUIETLY) HERE

THE LONG-AWAITED CORD CUTTING MOMENT IS STILL FAR OFF

THERE IS A "CABLE KILLER" COMING, BUT IT WON'T LOOK LIKE YOU EXPECT

E-SPORTS & WAGERING WILL CHANGE THE GAME IN GAMING

GOOD LUCK GETTING RICH IN THE APP STORE!

THESE COMPANIES ARE GRABBING ALL THE MONEY IN CONSUMER TECH & MEDIA

ONE SIMPLE WAY TO PREDICT WHAT TECH & MEDIA PLAYERS WILL DO NEXT TO COMPETE

Cable Killer

=

Equivalent or better video content

+

Lower-cost package to undercut the cable bundle

+

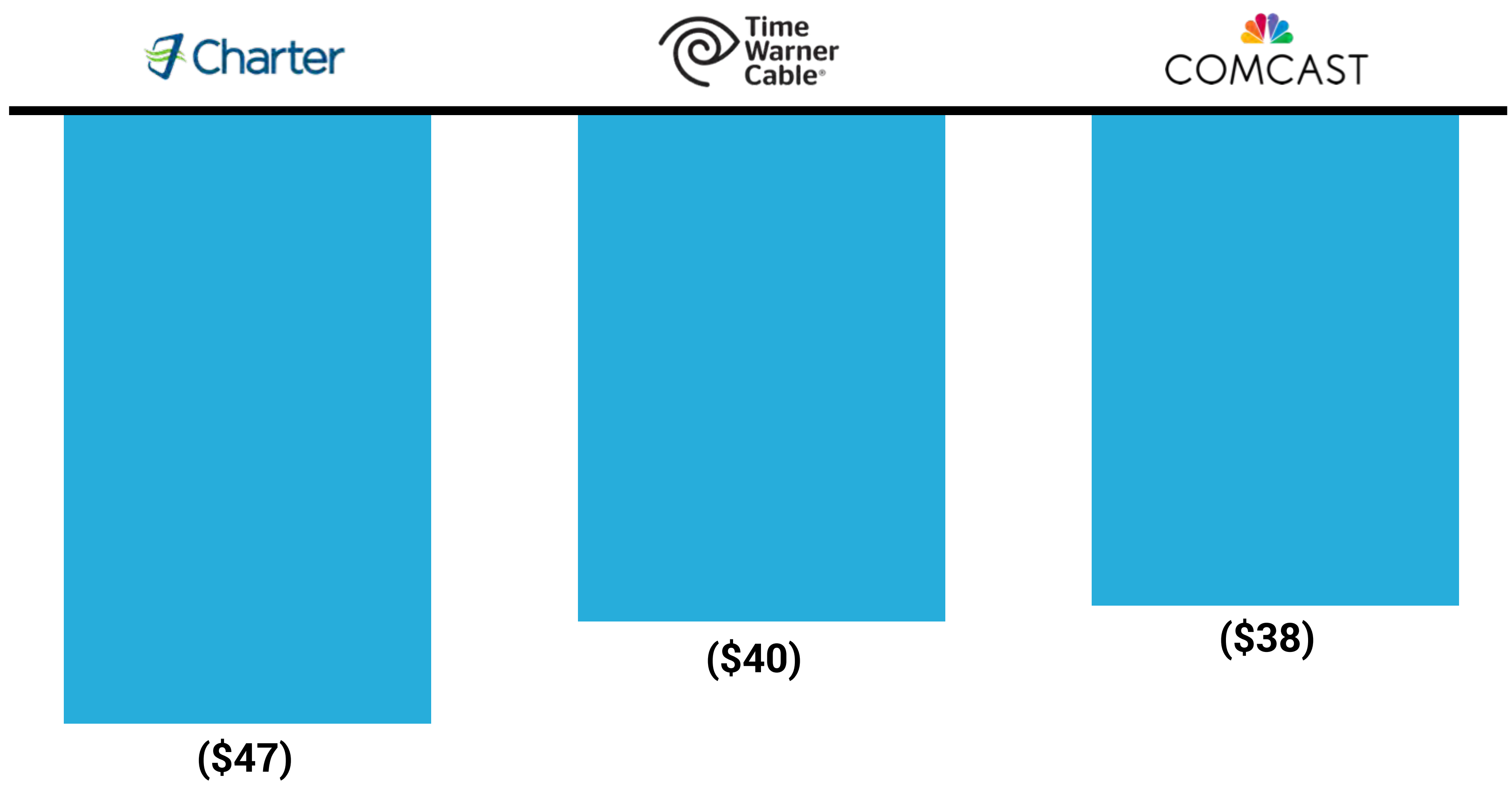
Better user experience and reliability

FOR A NEW PLAYER TO CREATE A POTENTIAL ‘CABLE KILLER’, THEY WOULD HAVE TO START BY LICENSING TOP-TIER CONTENT

Today's cable operators have a huge advantage: the biggest players pay the lowest cost per subscriber for content; far lower than a new entrant could pay

Monthly Programming Costs per Subscriber for Cable Providers, U.S., 2014

Programming costs subject to economies of scale



SUBSCRIBERS (Millions) 4 11 22

Source: Company 10K Filings, Leichtman Research Group, Activate Analysis

A potential 'cable killer' cannot easily compete with cable's broadband bundling advantage

Pay TV + Broadband Bundles

Comcast xfinity	Time Warner Cable	verizon	at&t U-verse	Charter
$50	$50	$50	$60	$90
UP TO 75 Mbps	UP TO 15 Mbps	UP TO 50 Mbps	UP TO 6 Mbps	UP TO 60 Mbps
45 Channels + HBO	24 Channels + HBO & Showtime	70 Channels + HBO	130 Channels	125 Channels
Does not include ESPN	*Does not include ESPN*	*Does not include ESPN*		

Sources: AT&T, Charter, Comcast, Time Warner Cable, Verizon, Activate analysis

A new entrant could create a better user interface, but would most likely need to *increase* the monthly cost for consumers – similar to the introduction of smart phones

Motorola RAZR (2007)

iPhone (2007)

$50+

DEVICE/VOICE/TEXT PER MONTH

UX Improvements

- Touchscreen capability
- App and multimedia integration
- Improved device sensors
- Faster data connections

$90+

DEVICE/DATA/VOICE/TEXT PER MONTH

Sources: Apple, Engadget, FCC, Activate analysis. Hardware prices assume two-year Cingular contract. Service cost estimates based on FCC averages of monthly costs for subscribed households.

THE “CABLE KILLER” WON’T BE A LOW-PRICED COMPETITOR, IT WILL BE “SMART CABLE”

JUST AS SMARTPHONES FIRST DISRUPTED THE WIRELESS MARKET (AND INCREASED MONTHLY BILLS) BY CREATING A SUPERIOR HIGH END EXPERIENCE, SMART CABLE COULD TARGET THE MOST LUCRATIVE AND PROFITABLE CUSTOMERS.

What would a "cable killer" have to do to compete with a cable company's advantages?

Bundle for distribution. Players that have established a foothold with consumers by selling devices like smartphones or set-top boxes can offer content subscriptions on top

Bring your own broadband. Allow consumers to bring their own, or include with partner provider or new competitor

Better search and discovery. Search capabilities across video providers, regardless of source, uniting TV content and web videos

Seamless access. Integrated platform to access all types of video content - Digital Subscriptions, Web Video, TV Everywhere - across all devices

Simplicity and customer service. Easy choices with price transparency and customer-friendly policies to contrast with current cable frustrations

Premium pricing (that's worth it). Target the high end of the market, preserving margins while paying for higher content licensing costs - and integrating all other subscriptions for one monthly bill

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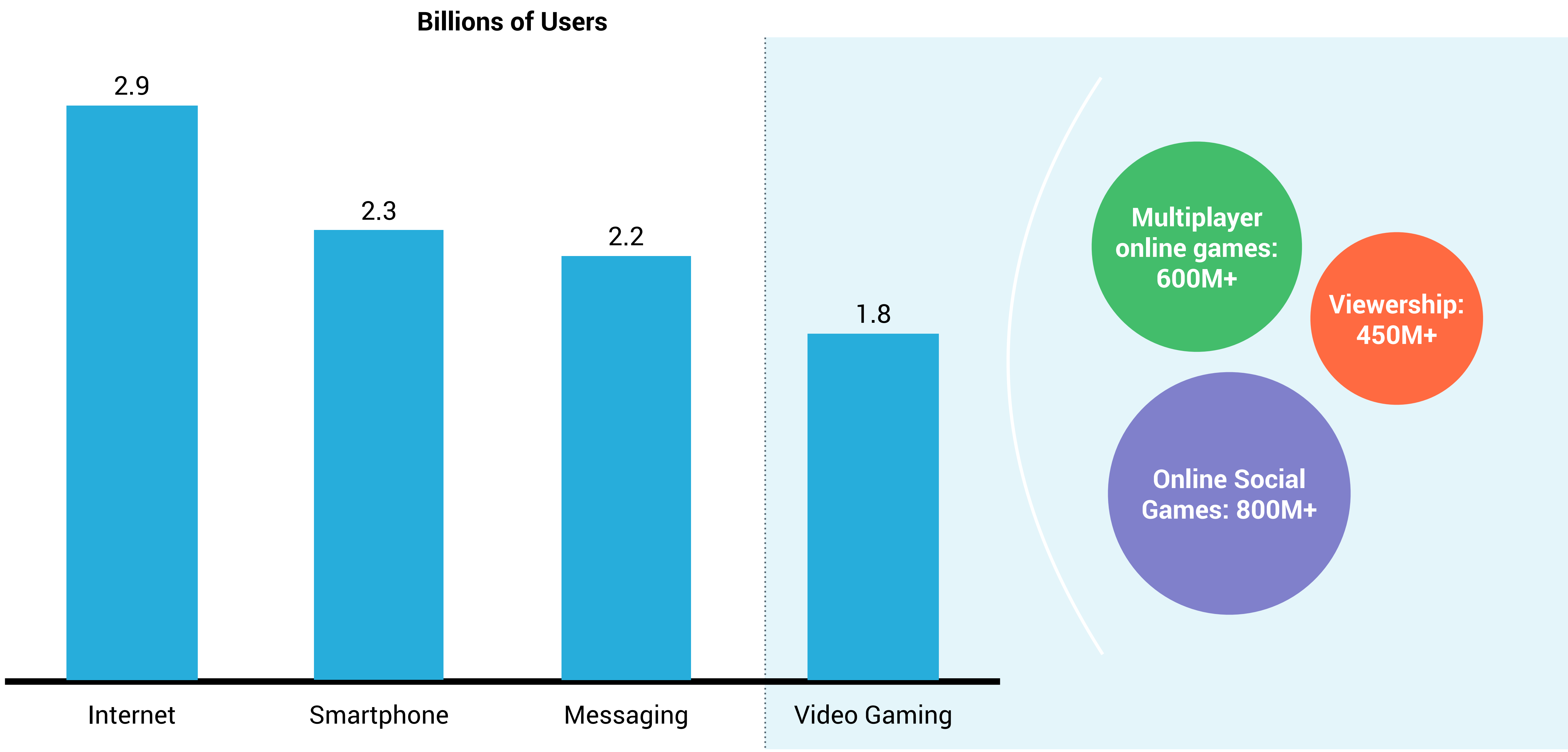
Video gaming is one of the most widespread consumer behaviors with ~2 Billion highly networked and connected users worldwide – and growing

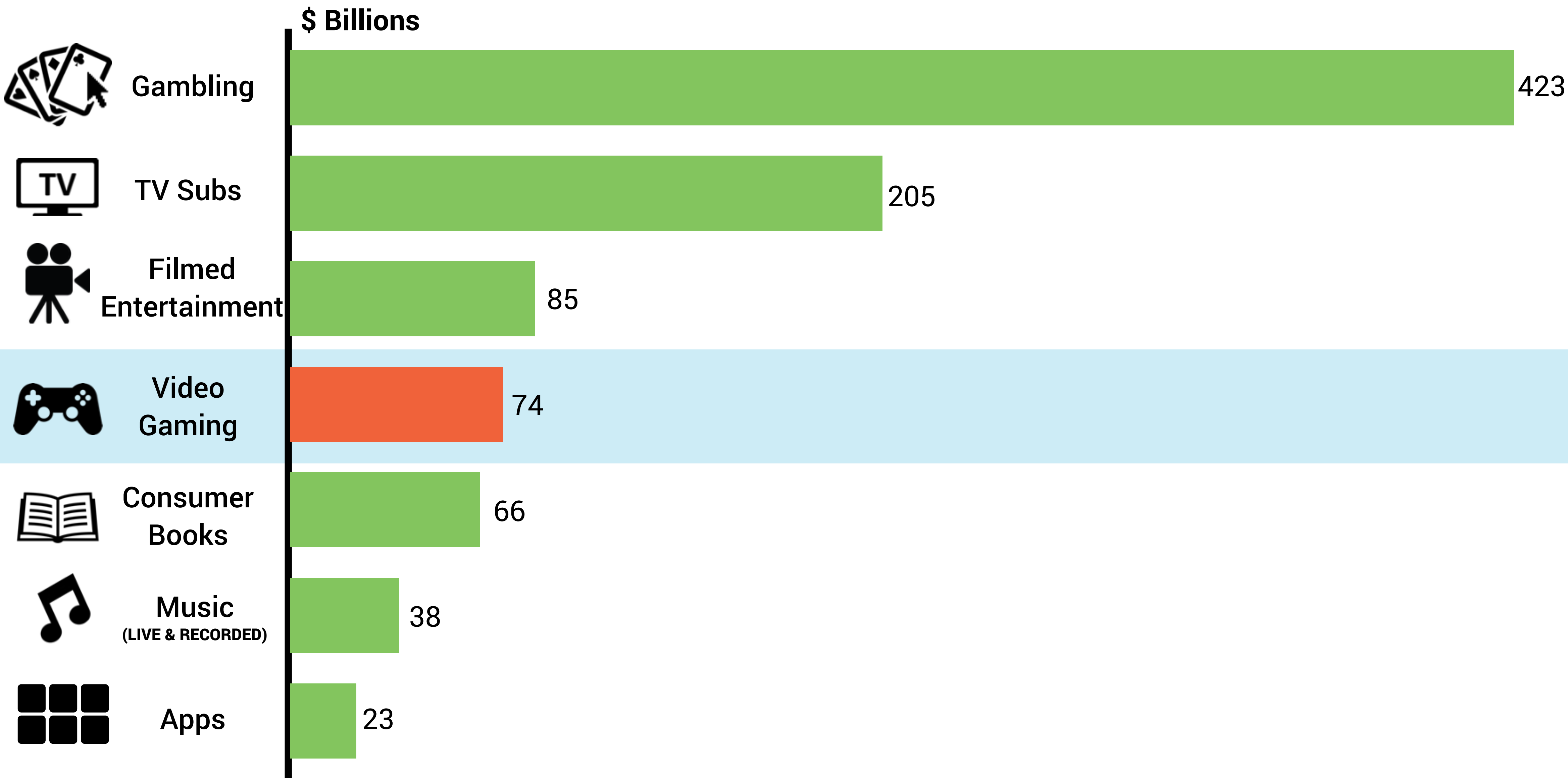
Number of Users by Tech Platform, Global, 2014



Sources: eMarketer, GlobalWebIndex, ITO, Morgan Stanley, NewZoo, SuperData, Activate analysis

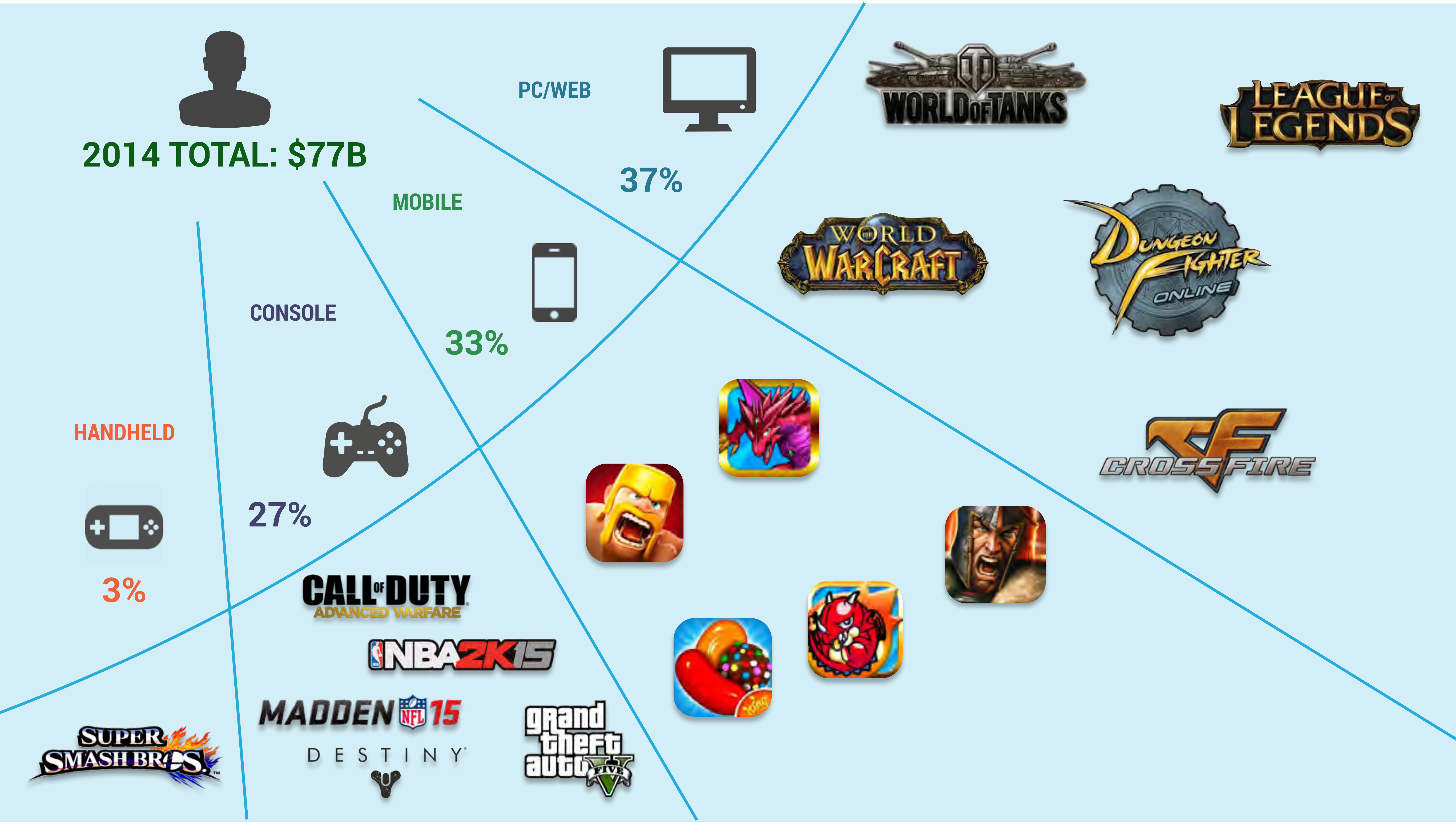
Global spend of $74 Billion is likely to expand as video gaming broadens to include advertising and gambling streams

Consumer Spend on Major Entertainment Segments, Global, 2014



Sources: IBISWorld, IFPI, McKinsey & Company, Morgan Stanley, NewZoo, PwC, SuperData Research, Activate analysis. Filmed entertainment includes all ancillary revenue; apps comprise Apple and Google Play and include gaming apps

PC/Web is the leading video gaming platform by revenues, with mobile as a close second



Sources: NewZoo, PwC, SuperData Research, Activate analysis. Revenue includes consumer spend and advertising.

The top games across PC/Web, Console and Handheld are increasingly multiplayer – mobile is the exception

Most Popular Games by Platform

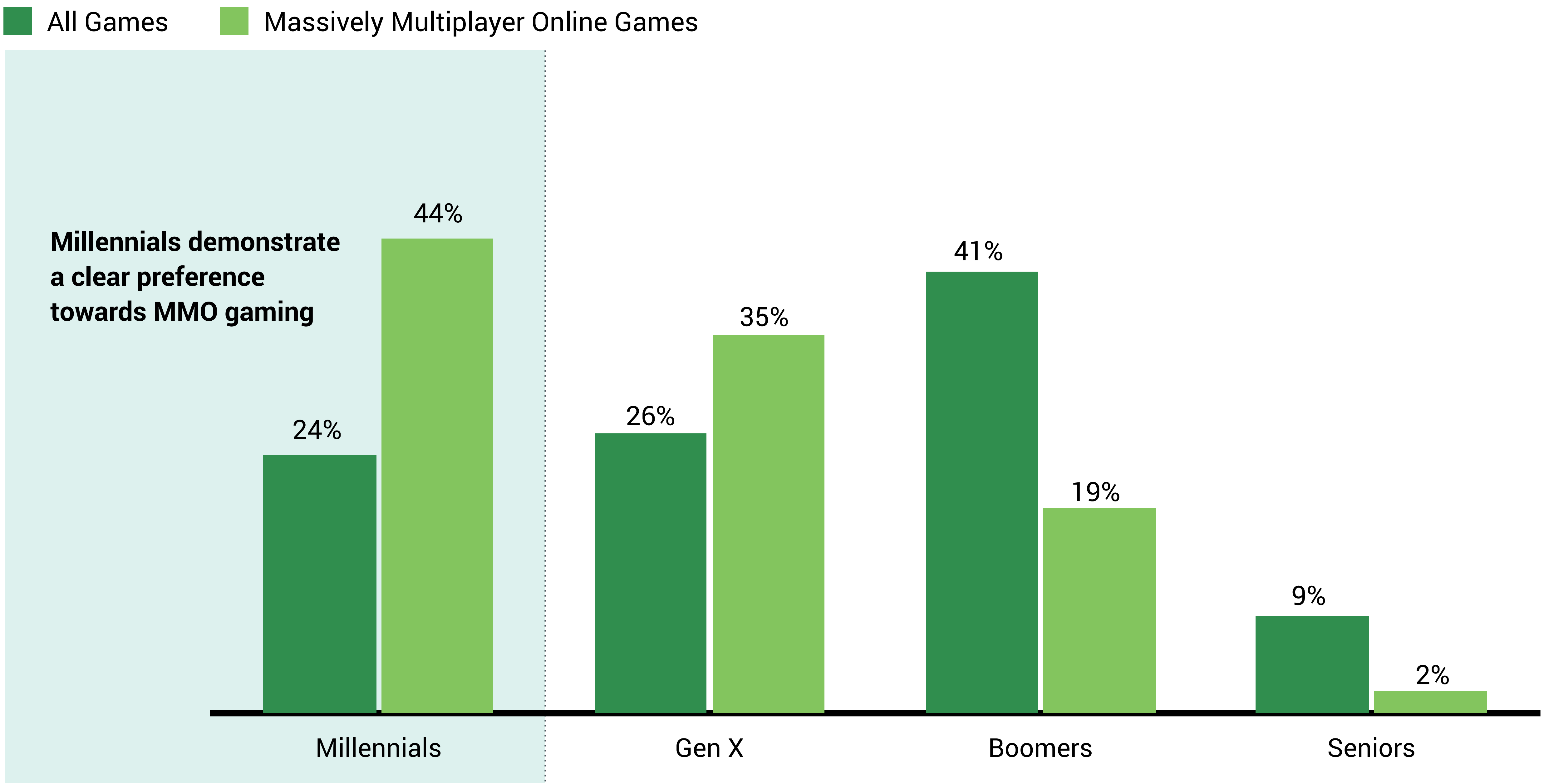
Online Multiplayer

PC/Web	Mobile	Console	Handheld
League of Legends	Clash of Clans	Call of Duty Advanced Warfare	Super Smash Bros.
World of Tanks	Candy Crush Saga	FIFA 15	Pokémon Omega Ruby Alpha Sapphire
DOTA 2	Puzzle & Dragons	Destiny	Mario Kart 8

Sources: Digitaltrends, Raptr, Valve, The Verge, VGChartz, Activate analysis. Based on registered/active users and unit sales as applicable

The growth of multiplayer gaming will be driven by Millennials

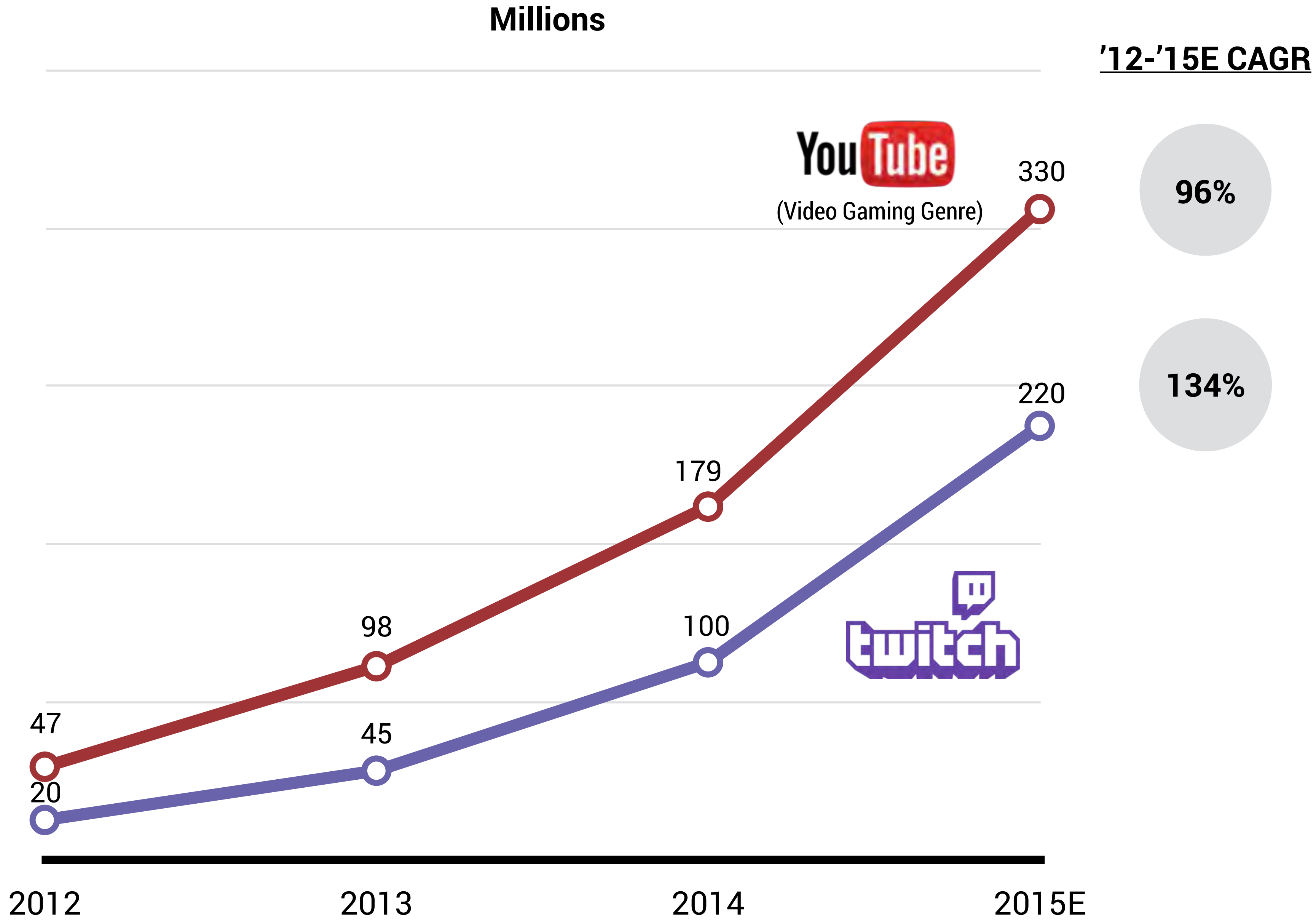
Consumer Spend on Major Entertainment Segments, Global, 2014



Sources: ESPN, SNL Kagan, Activate analysis

Video gaming has now broadened beyond individual players to include a wider spectator audience

YouTube Video Gaming and Twitch Monthly Unique Visitors, Global, 2012-2015E



Global viewership reached 450M+ in 2015

Gaming as video content includes:

- **Gameplay commentaries**
- **Professional gaming competitions**
- **Tutorials**
- **Video game trailers**
- **Walkthroughs**

Sources: SNL Kagan, Twitch, SuperData Research, Activate analysis

YouTube viewership for gaming channels demonstrates the massive consumer interest in video gaming

Metrics for the Top 15 YouTube Video Gaming Channels*

VIDEO VIEWS

47 Billion

(~3B+ PER CHANNEL)

2015E Growth: +40%

SUBSCRIBERS

165 Million

(~11M PER CHANNEL)

2015E Growth: +20%

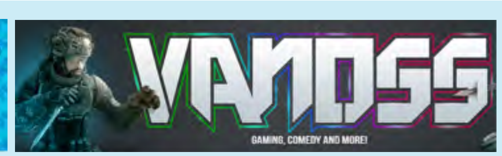
AVERAGE VIEW PER VIDEO

1.3 Million

2015E Growth: +30%

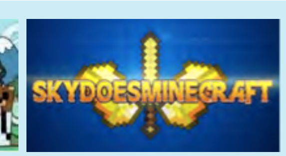
Top 5 Channels:

PewDiePie



VanossGaming

elrubiusOMG



SkyDoesMinecraft

JuegaGerman

Sources: e-Sports Earnings, SNL Kagan, Socialblade, Twitch, Activate analysis. Top 15 user-generated content channels as of October 1st 2015.

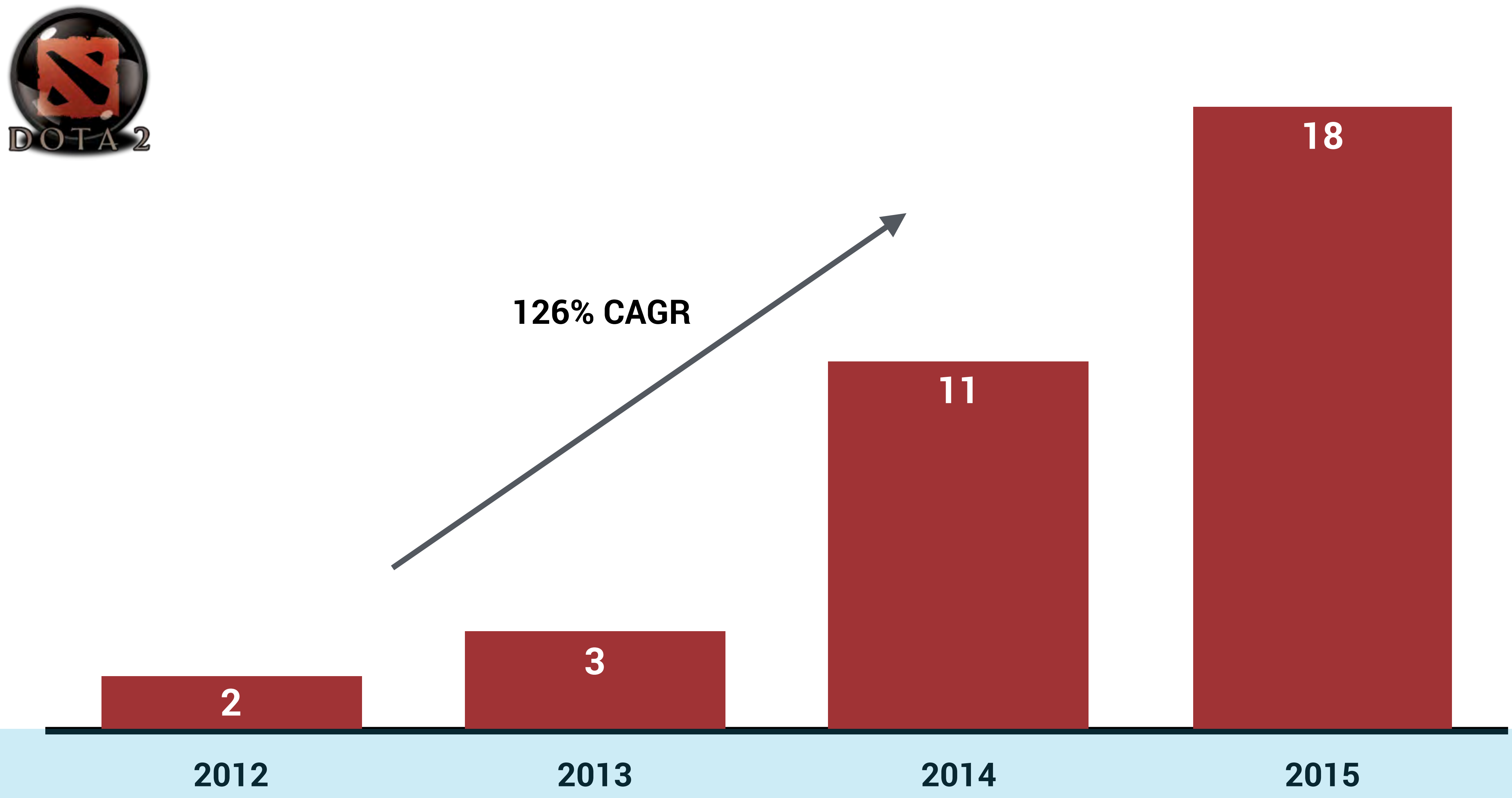
Organized multiplayer video game competitions are emerging as a formidable spectator sport: eSports

Examples of Major eSports Tournaments

Sources: Activate analysis

Growth in tournament prize pools - which are largely crowdfunded by fans - illustrates potential of eSports

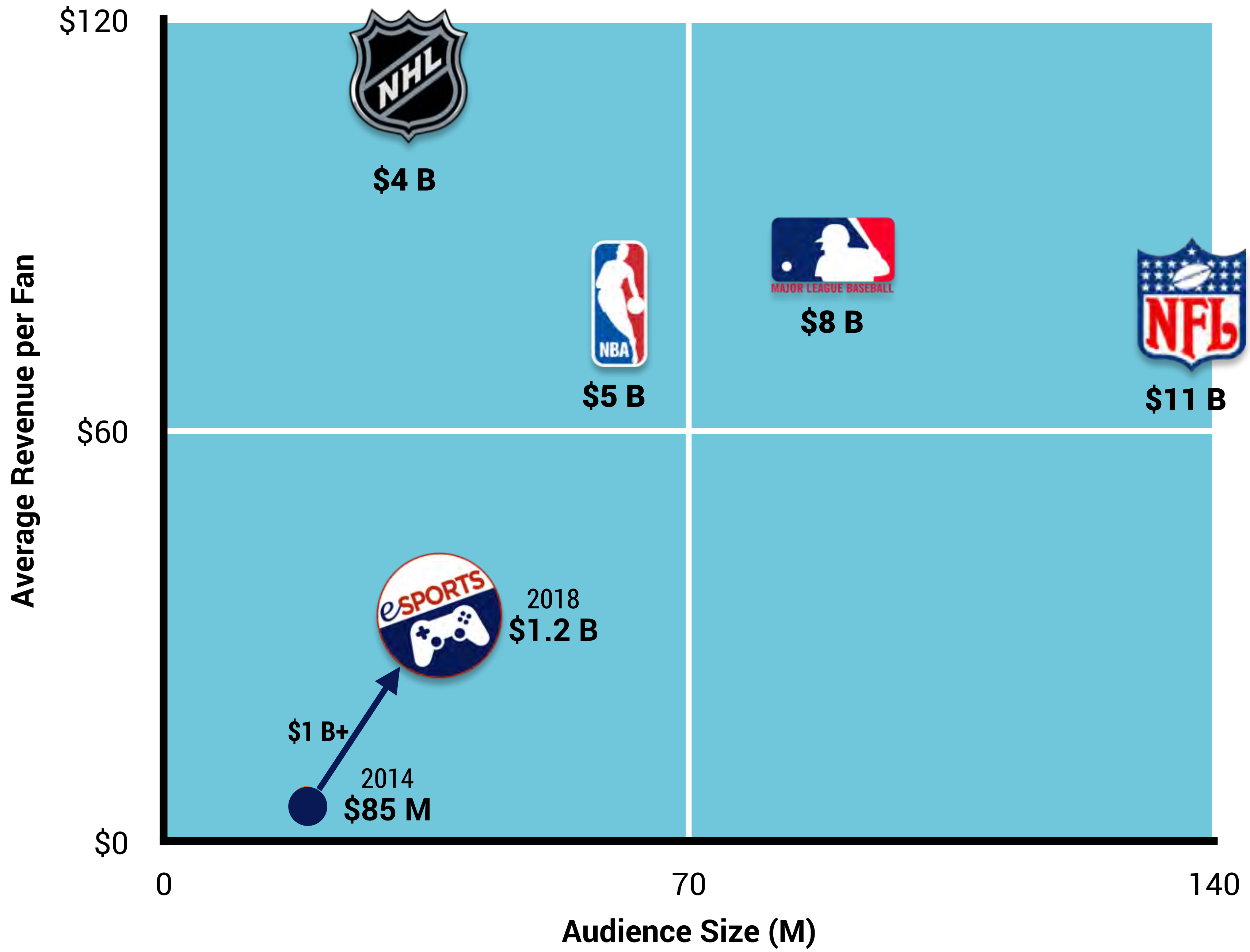
Dota 2 Example: Growth in Tournament Prize Pool, $M



Sources: SuperData Research, Forbes, Valve, Activate analysis

If eSports organized as a league, our forecast indicates that it would become a $1 Billion + business in the U.S. by 2018

Activate Forecast for eSports, U.S., 2018E



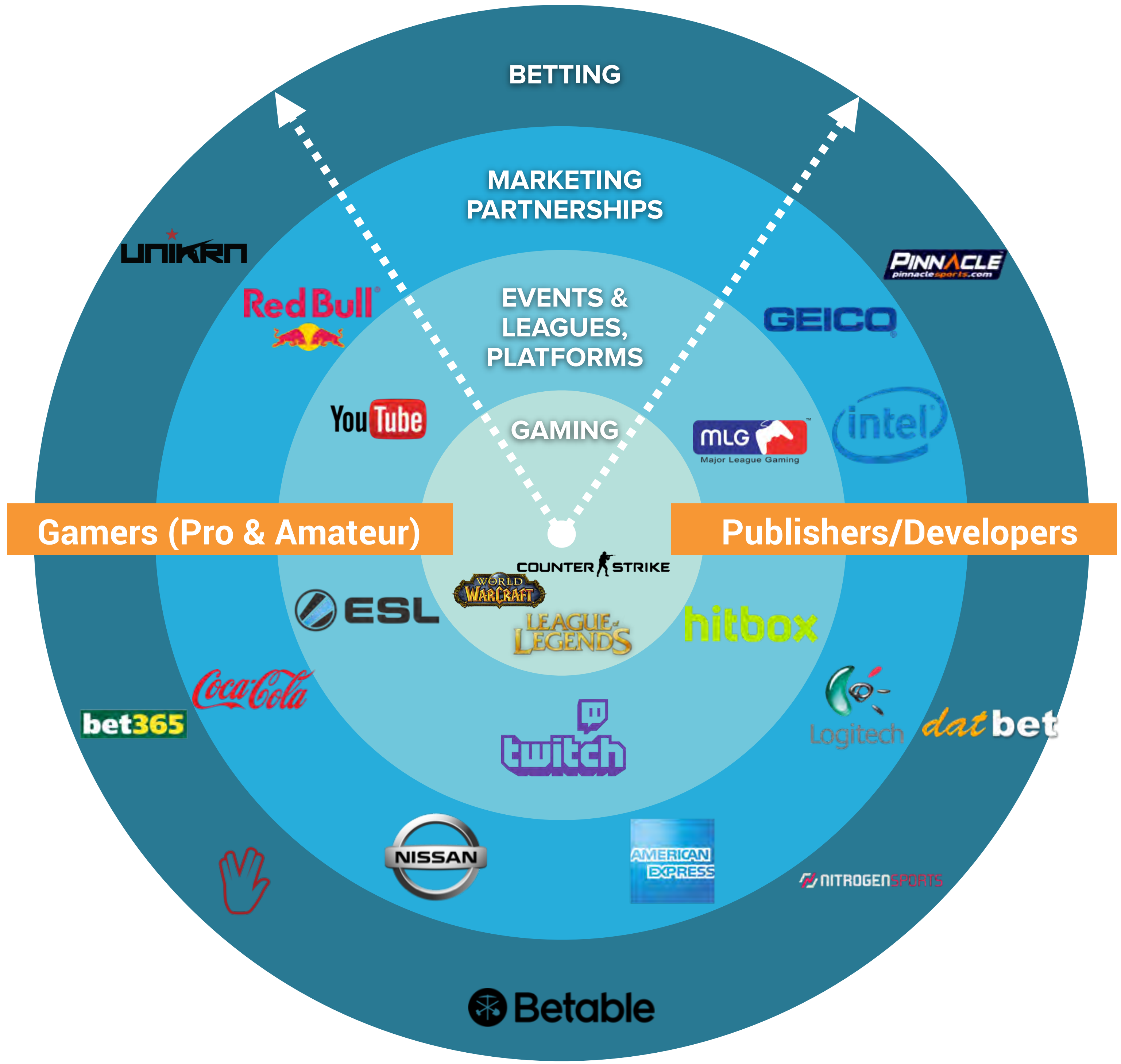
Sources: Forbes, NewZoo, Nielsen Scarborough, SuperData Research, Activate analysis

eSports will be a $4 Billion global business by 2018

Activate Forecast: eSports Revenue, Global, 2018E

Sources: Forbes, NewZoo, Nielsen Scarborough, PwC, SuperData Research, Activate analysis

As it grows, eSports will develop its own economy, extending from multiplayer games to marketing partnerships, and eventually betting



Sources: Adweek, Eurogamer, Digiday, Fortune, NewZoo, SuperData Research, VentureBeat, Activate analysis

Real money wagering will become an integral part of the video gaming experience

WAGERING

Real-money betting layer into games and other digital entertainment experiences

- New form of video game **MONETIZATION** (beyond ads, Freemium, Subscription)
- **SKILL-BASED** - require players to make multiple decisions and use strategies (not games of chance)
- **SOCIAL** - creates an environment of community and competition
- First person and spectator mainly on online multiplayer games, **eSPORTS EVENTS**

Why? Millennials find skill-based wagering a compelling leisure activity - and are not interested in rudimentary gambling

Ability to Deliver ○ Low ● High

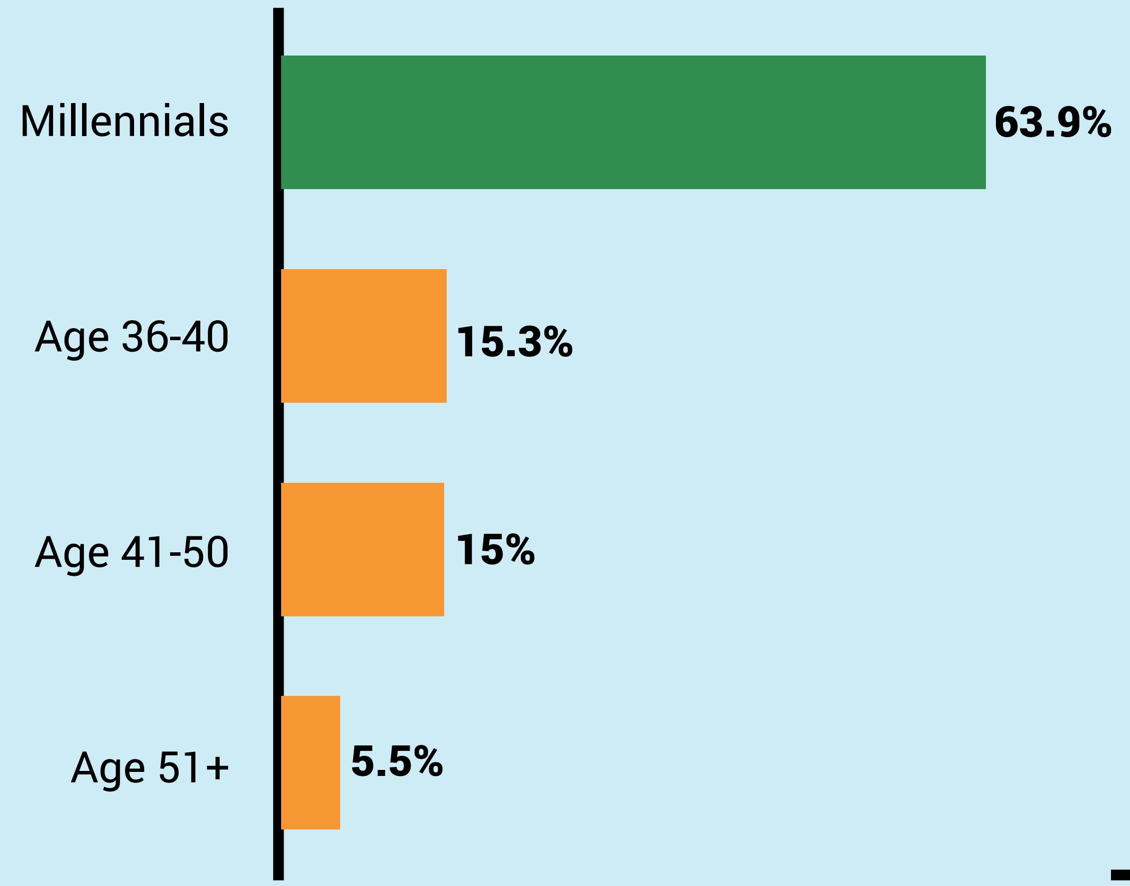
Millennial Preferences	Description	Casino Gambling	Season Fantasy	Daily Fantasy
ACCESSIBLE	Easy access from any location and platform (e.g. PC, smartphone, tablet)	○	●	●
EXPERIENTIAL	Interactive content consumption - cannot be consumed passively	●	●	●
IMMEDIATE	Available any time, provides instant gratification	●	◑	●
PERSONALIZED	Content created or customized based on personal preferences	○	●	●
SOCIAL	Peer-led, community-based participative experience	◑	●	●

Sources: Adweek, Barkley, Boston Consulting Group, Elite Daily, Ipsos MediaCT, Lifecourse Associates, University of Nevada, New Jersey Institute of Technology, Nielsen, Verizon, Activate analysis

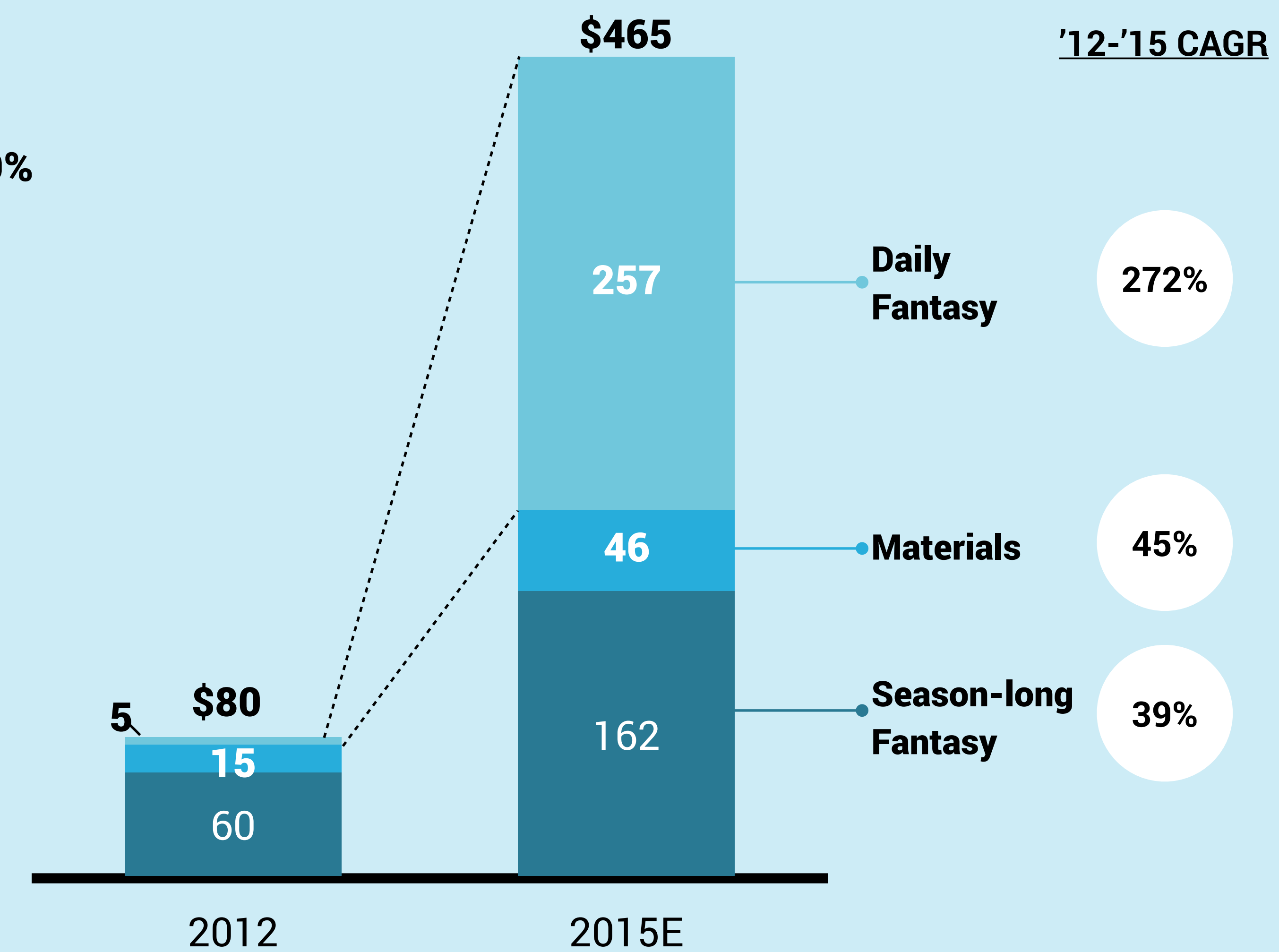
Millennials' preference in skill-based wagering is demonstrated by their interest in daily fantasy sports

DEMOGRAPHICS OF U.S. DAILY FANTASY PLAYERS, 2015

n=1,243



AVERAGE SPEND BREAKDOWN PER PLAYER*



Sources: Eilers Research, Fantasy Sports Trade Association, IBISWorld, Sports Business Journal, Activate analysis

Today, players pay to participate and fund prize pools for eSports tournaments, but can only win virtual goods/currency themselves

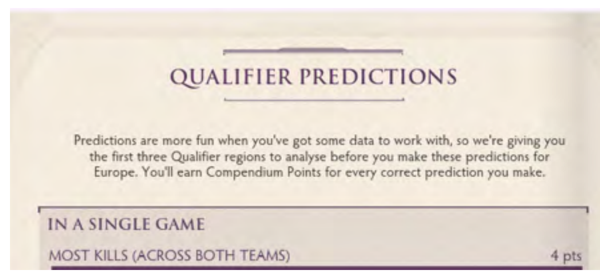
AQUIRE & CONTRIBUTE

1

The Compendium is a one-time purchase for $9.99:

- **25% of purchase price gets added to the International Prize Pool**
- **In 2015, total contributions amounted over $17M of the prize pool for Dota 2 eSports tournament**

PREDICT & EARN



2

Purchase provides player stats and history, enabling purchasers to make predictions for Dota 2 tournament and qualifiers, e.g.:

- **Player with most kills**
- **Largest critical hit**
- **Latest first blood**

3

Correctly making predictions earns points

BE REWARDED

EXAMPLE: **The Immortal Chest**

4

Points can be redeemed for rewards, but points remain virtual and rewards do not always pertain to player preferences

WAGERING ALTERNATIVE

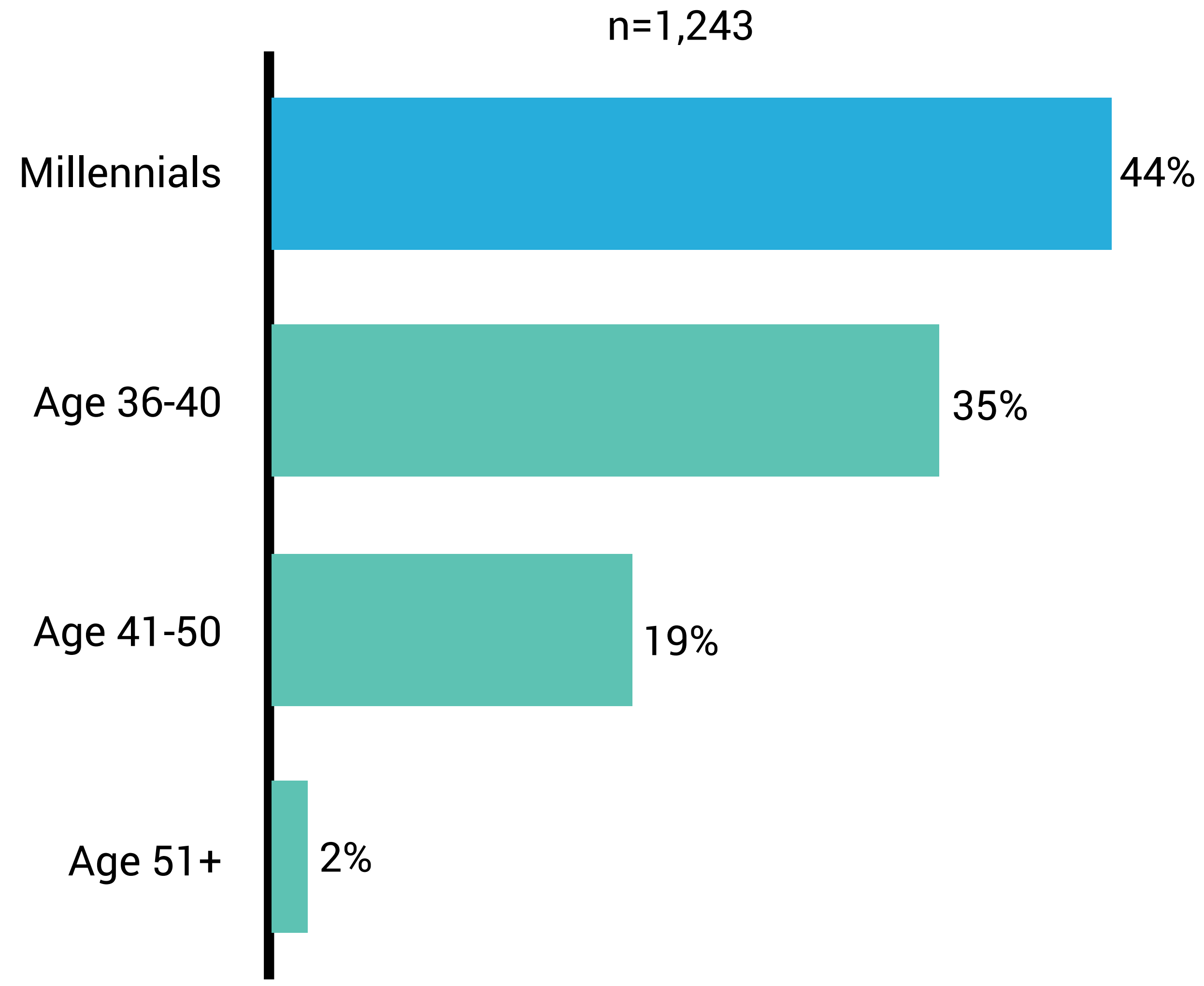
Use real money for increased transparency and engagement

Allows players to pick and purchase items of preference

Sources: Dota 2, SteamCommunity.com

Millennials favor real money rewards for in-game competitions

Players of Massively Multiplayer Online Games by Age Segment



59%

of Millennial Gamers would be more interested in earning real-money rewards than current in-game rewards

n=284

Sources: SNL Kagan, Activate 2015 survey of adults 18+, Activate analysis

Early examples of real-money wagering are already taking place - but off platform

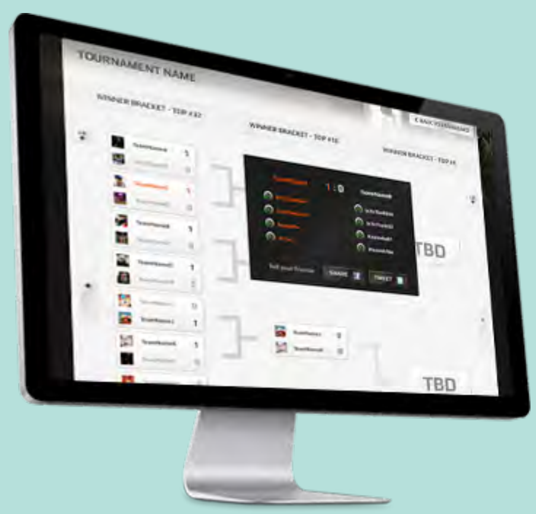
COUNTER STRIKE FIRST-PERSON EXAMPLE: HOW TO EARN REAL MONEY REWARDS USING FACEIT CHALLENGE YOUR GAME GAMING PLATFORM

REGISTER

- Enter game profile information
- Automatic verification of information
- Platform updates profile based on player statistics

PARTICIPATE

- Join tournaments or ladder matches for free
- Join specific competitions based on skill level



PLAY TO WIN

- Platform automatically verifies results
- Awards victory to winning player

CLAIM REWARDS

- Winners collect FACEIT points
- Use points in FACEIT store to redeem prizes

Sources: FACEIT company website

Top multiplayer online games with mass audiences will likely be the first to feature wagering

Examples of Popular MMO Games by Type

Massively Multiplayer Online Games

Battle Arena (MOBA)	First Person Shooter (MMOFPS)	Role-Playing Game (MMORPG)	Strategy Games
League of Legends	Counter Strike	World of Warcraft	Clash of Clans
Dota 2	Team Fortress 2	Hearthstone: Heroes of Warcraft	Boom Beach
Heroes of the Storm	Call of Duty: Advanced Warfare	Lineage II: The Chaotic Throne	StarCraft II
Smite: Battleground of the Gods	Destiny	Final Fantasy XIV: A Realm Reborn	Game of War: Fire Age

Source: GameSpot, MMOBomb, Raptr, Reddit, VentureBeat, Activate analysis

The $80 Billion+ video gaming ecosystem will evolve to include tech that enables wagering as monetization of audiences

Spectators — **First-Person and Spectator Wagering Participants**

Audience Platforms: twitch, MLG Major League Gaming, YouTube

Betting Technology: skillz, UNIKRN, Betable

Gamers

Distribution
- Console: Microsoft, SONY, Nintendo
- App Stores: Google play
- Digital Download: Origin, STEAM
- Social: facebook, WeChat
- Physical Retailers: Walmart, GameStop POWER TO THE PLAYERS, TARGET

Monetization
- In-App Purchases & DLC: Microsoft, SONY, Nintendo, Google play
- In-Game Advertising: RapidFire In-Game Advertising, Chartboost
- Payments: SecurePay A business of Australia Post, PayPal, mopay mobile payments
- Wagering: Betable, cashplay.co

Publishers
- AAA & Console: Activision Blizzard, SEGA, VALVE, EA Electronic Arts
- Mobile & Casual: PopCap, King, Big Fish Games, zynga
- MMO & Social: Supercell, Riot Games, Tencent 腾讯

Platform Tech
- Game Engines: unity games, Unreal
- Analytics: SuperData digital goods measurement, App Annie
- Frameworks: NVIDIA, euphoria

Developers
- AAA & Console: T2 Take Two Interactive, VALVE, Ubisoft, Mojang
- Indie: Double Fine, Coffee Stain Studios

Sources: NewZoo, PwC, SuperData, Activate analysis

To capitalize on the growth potential, the industry will continue to integrate media, entertainment, and tech companies through…

…Mergers and Acquisitions

Completed Examples (2015 YTD)

TALENT

EVENTS, LEAGUES, PLATFORMS

WAGERING

ANALYTICS

…Strategic Partnerships

Announced Examples (2015 YTD)

WEB TV

&

&

TRADITIONAL MEDIA

&

&

WAGERING (INCL. BETTING TECH)

&

&

Sources: ABC News, Azubu, CBC News, The Daily Dot, Dotabuff, Engadget, Fortune, Huffington Post, Mashable, Company Press Releases, Activate analysis

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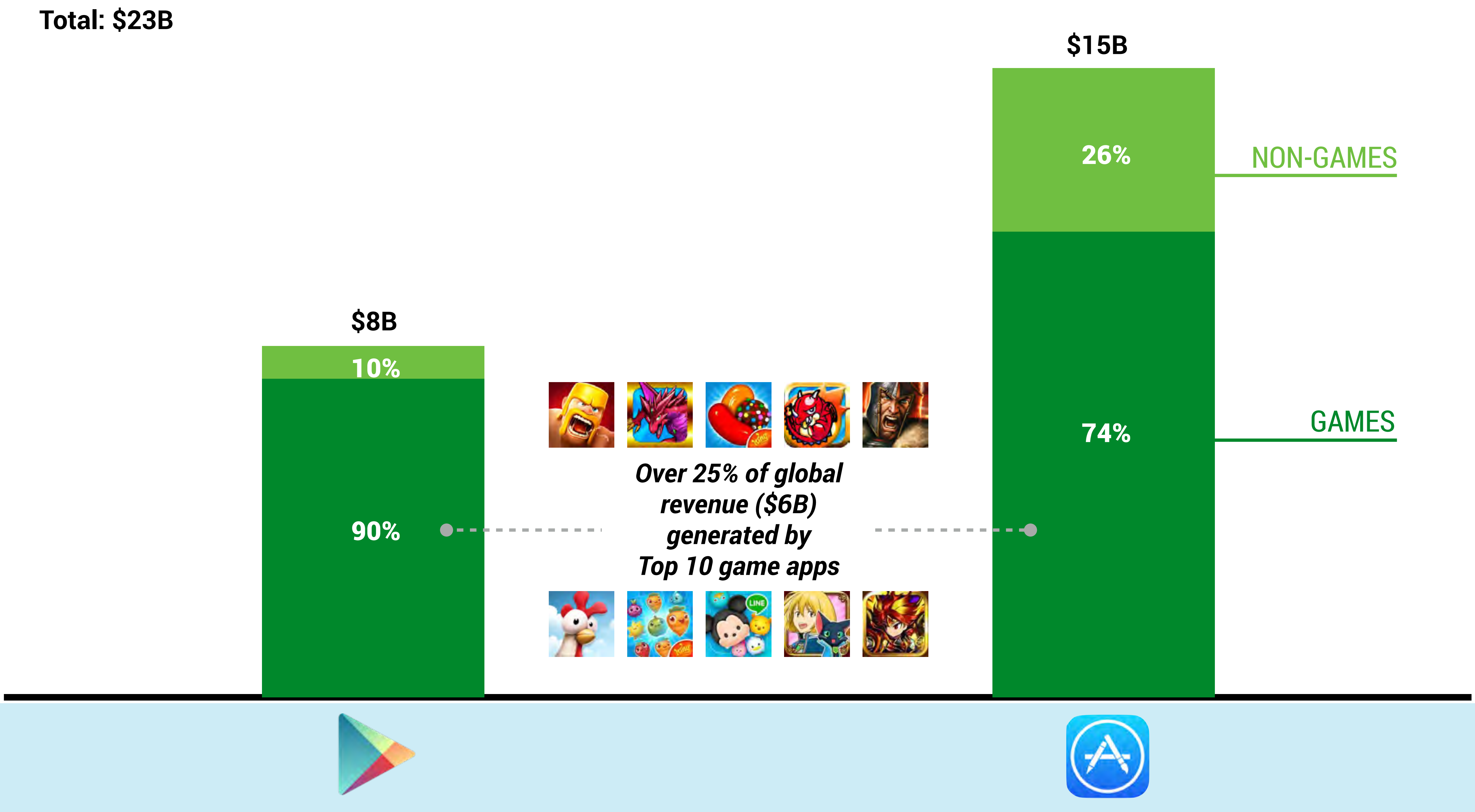
THE DREAM OF THE INDEPENDENT DEVELOPER BUILDING A BUSINESS IN THE APP STORE IS OVER

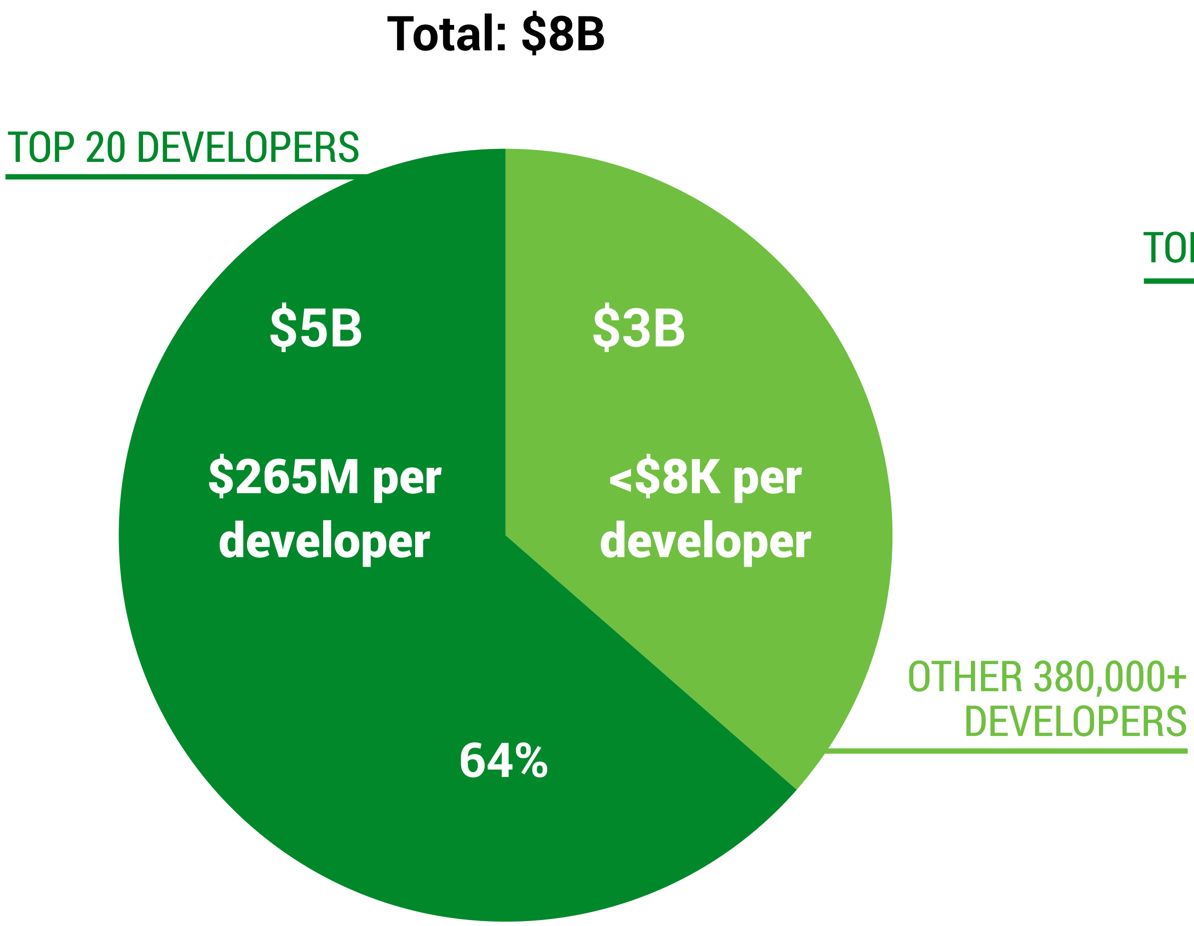
The top 10 games take 25% of the $23 Billion in global app revenue

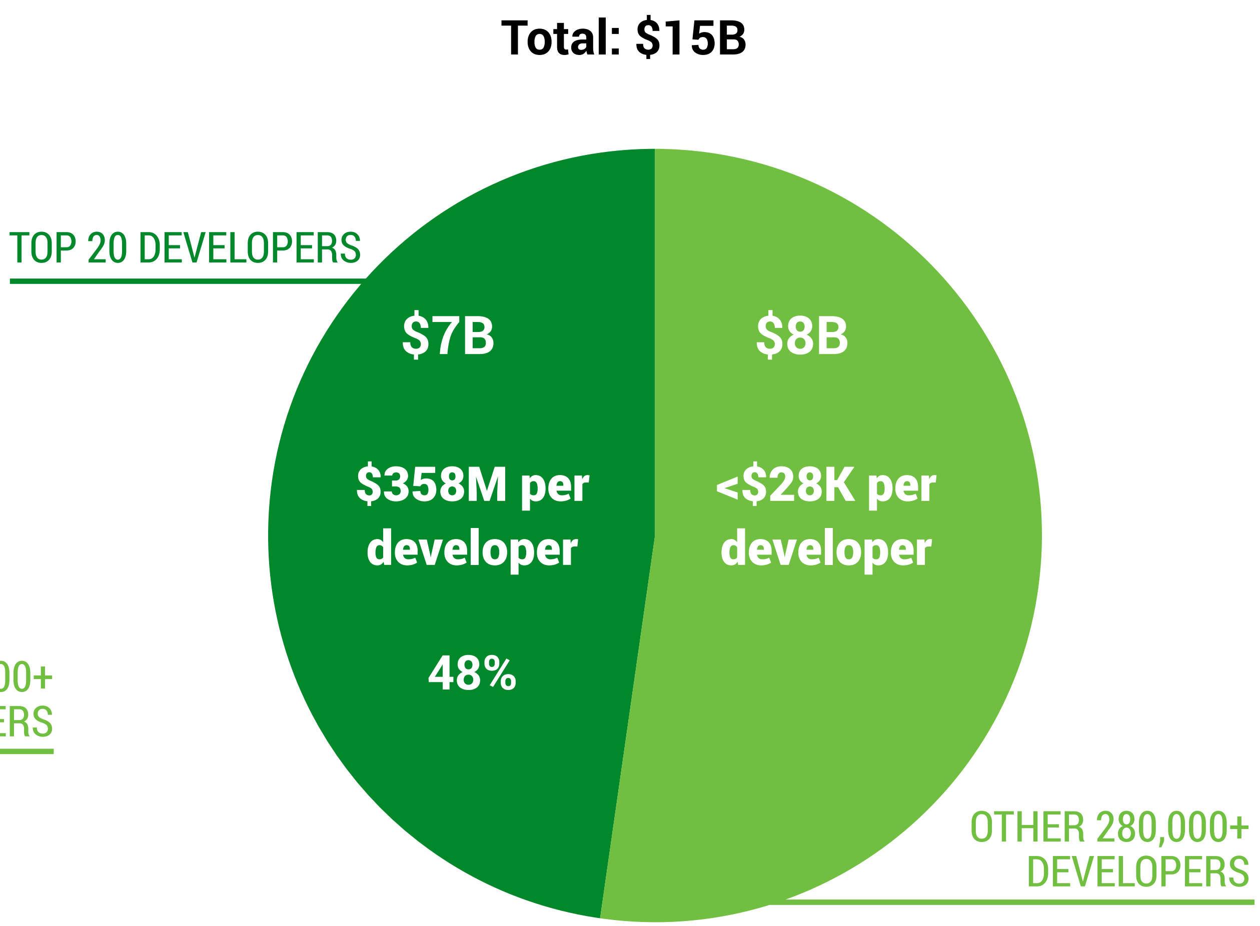
Google Play & iTunes App Store Revenues, Global, 2014



Sources: Apple, App Annie (Distimo), IDC, Digi-Capital, Think Gaming, SuperData Research, Activate analysis

The number of developers on a platform doesn't matter if the top 20 publishers take most of the money

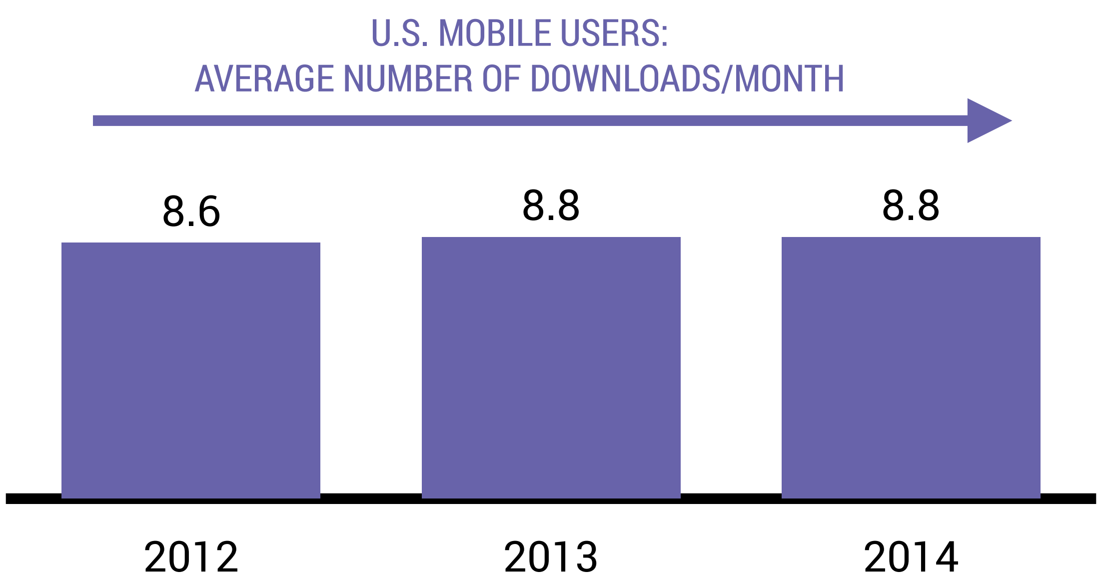




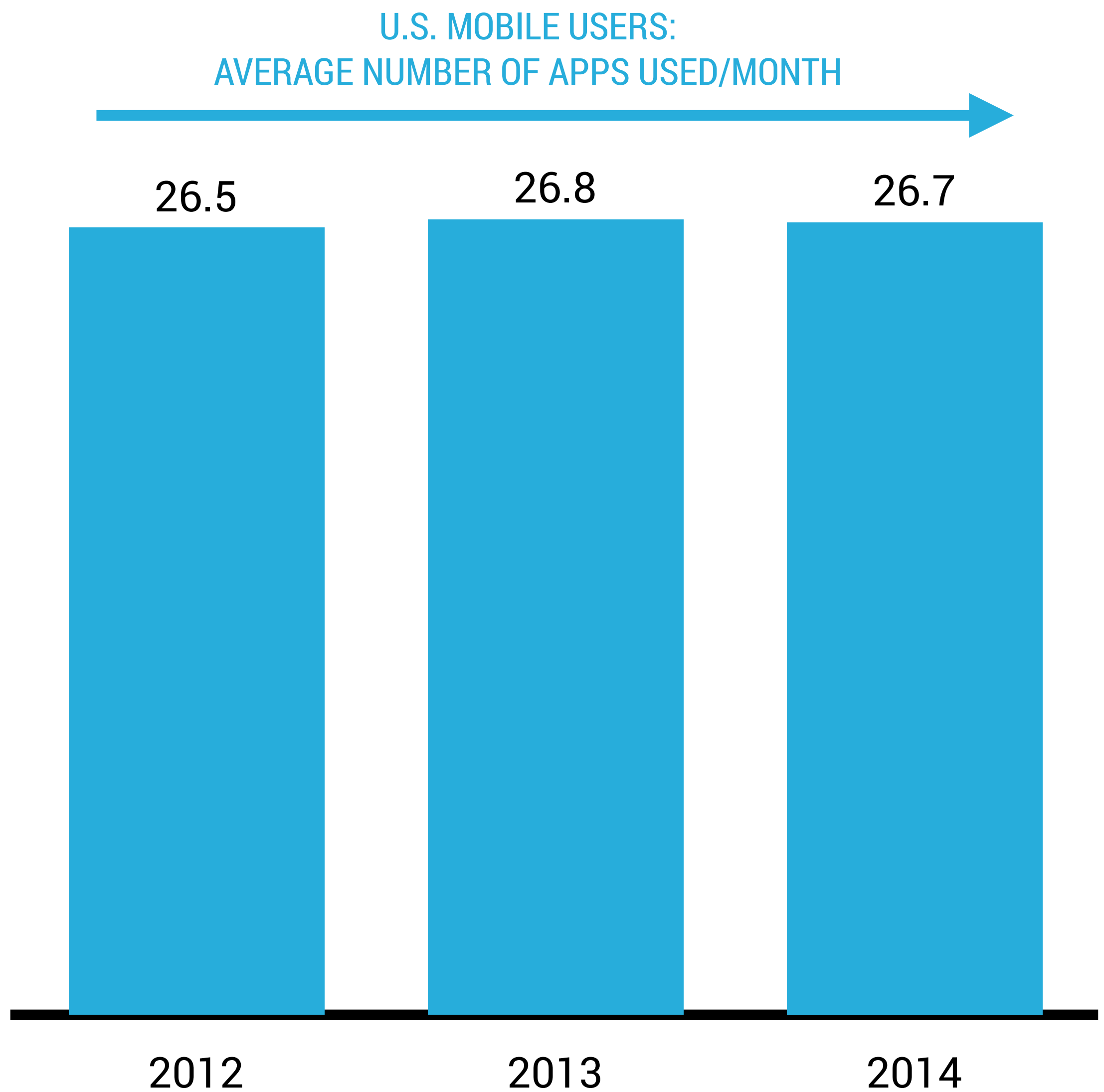
Sources: App Annie, appFigures, Apple, Google, PocketGamer.Biz, Think Gaming, Activate analysis

Despite massive number of available apps, users are downloading and using the same number of apps

Number of downloads remain unchanged…



…as do the number of apps used

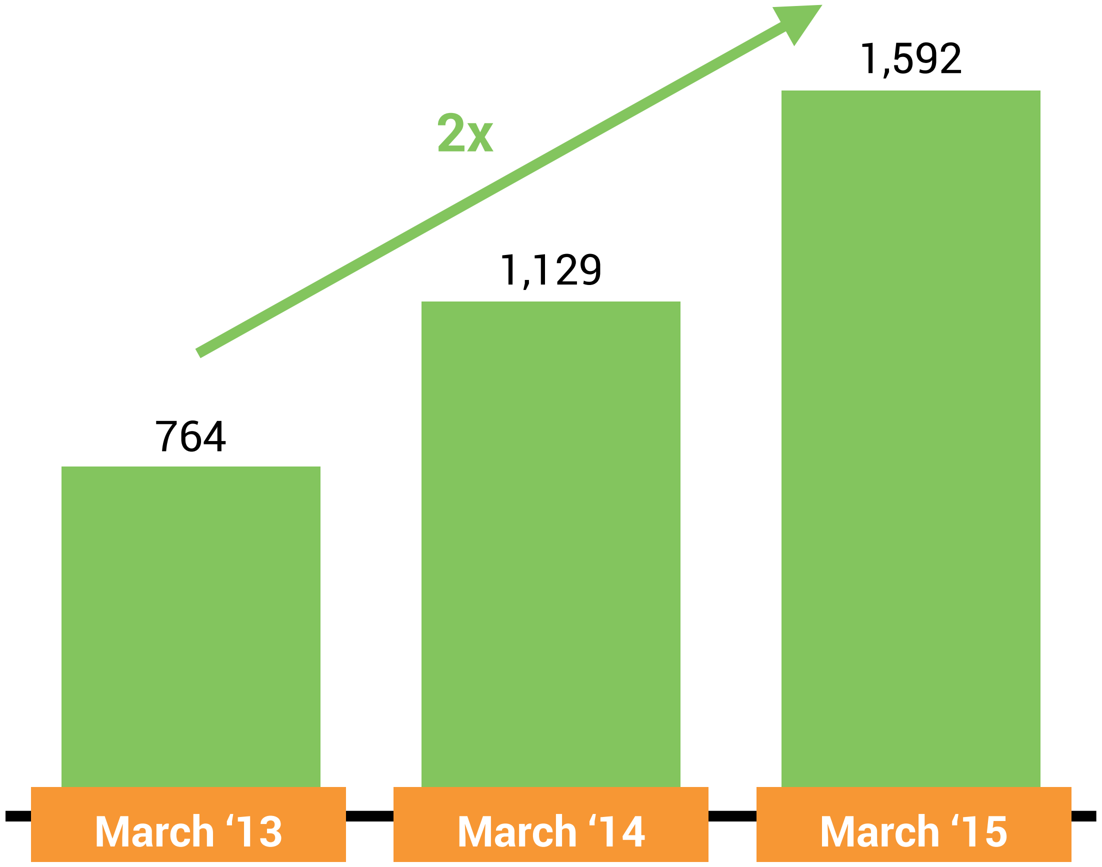


Sources: eMarketer, Flurry, Nielsen, Activate analysis

Discoverability continues to be a barrier to the long-tail as app count and cost per install increase concurrently

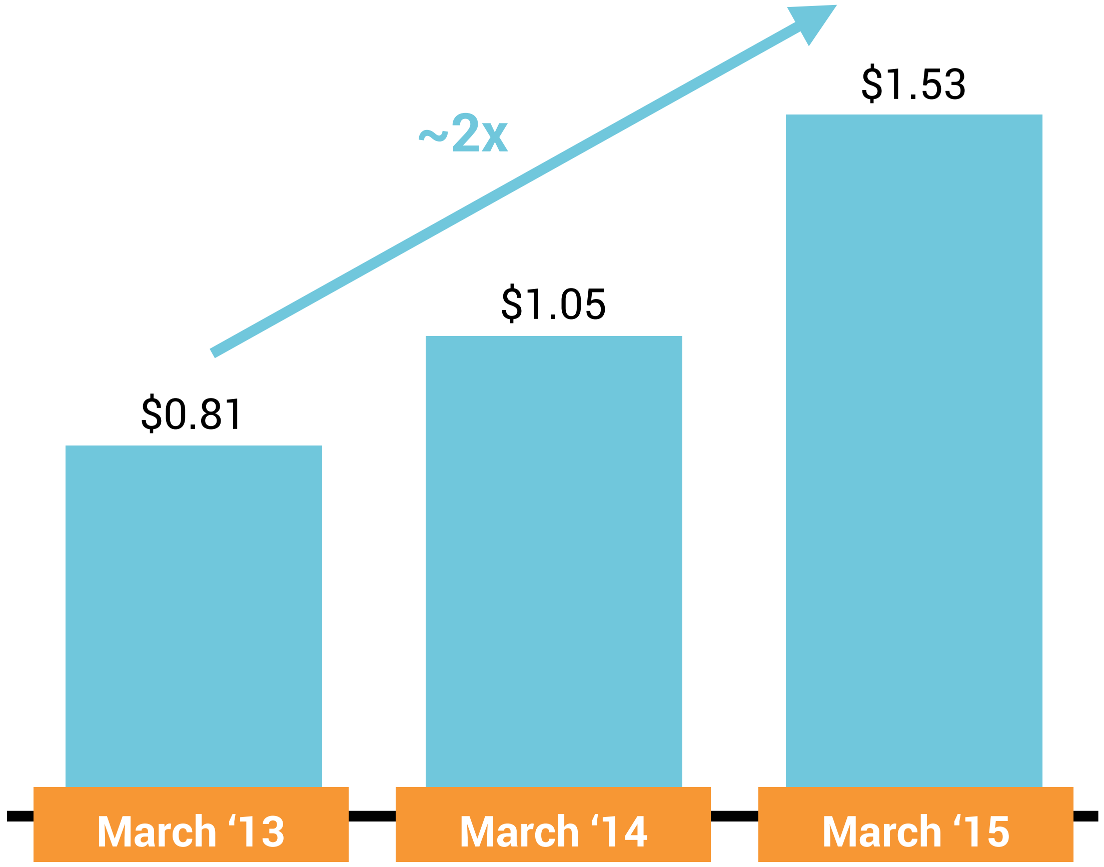
App count continues to grow exponentially…

U.S. ITUNES APP STORE: ACTIVE APP COUNT
THOUSANDS



…along with the cost to earn downloads

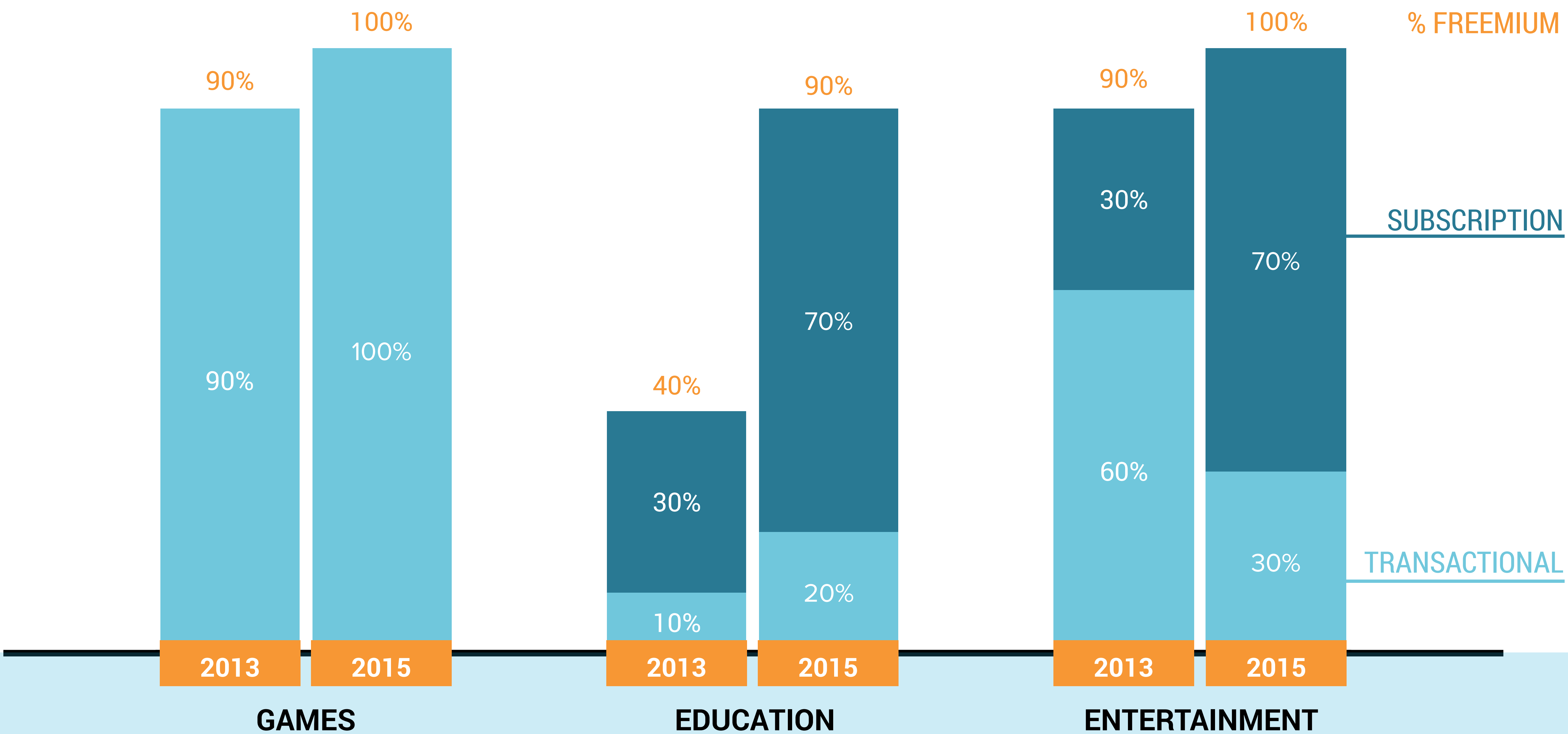
U.S. ITUNES APP STORE: COST PER INSTALL DIRECTLY ATTRIBUTED TO ADVERTISING



Sources: iTunes App Store as retrieved from PocketGamer.biz, eMarketer, Fiksu, Activate analysis

Freemium has become the prevalent business model for top grossing app categories, with subscription dominating except for games

Freemium Apps as % of Top 10 Grossing Apps at iTunes App Store, Global



Sources: Apple, App Annie (Distimo), Activate analysis

The majority of top apps by unique visitors monetize outside of the app store

Top apps in iTunes App Store, U.S., June 2015

Rank	App Name	Unique Visitors (M)	Growth	Business Model – Generates App Store Revenue? YES	NO
1	Facebook	125.7	0.09		•
2	YouTube	98.9	0.18		•
3	Facebook Messenger	95.7	1.44		•
4	Google Search	81.1	0.16		•
5	Google Play Music	77.4	0.07	•	
6	Google Maps	76.5	0.19		•
7	Pandora Radio	74.2	0.08	•	
8	Gmail	67.9	0.13		•
9	Instagram	63.1	0.35		•
10	Apple Music*	49.7	0.22	•	
11	Apple Maps	49.3	0.17		•
12	Yahoo Stocks	46.4	0.1		•
13	Amazon Mobile	43.7	0.65		•
14	Twitter	41.3	0.19		•
15	Pinterest	40.8	0.66		•
16	The Weather Channel	35.8	0.17		•
17	Snapchat	34.1	0.29	•	
18	Google+	33.1	0.15		•
19	Netflix	32.8	0.18	•	
20	Weather Channel Widget	32	N/A		•

15 OF THE TOP 20 APPS **do not generate any app store revenue**

Sources: comScore, Activate analysis

A new wave of companies are building businesses by using the app store for distribution and engagement, but not monetization

Sources: Activate analysis

THE AVERAGE AMERICAN SPENDS MORE TIME ON TECH & MEDIA THAN WORK OR SLEEP

MESSAGING WILL BLOW PAST SOCIAL NETWORKS AS THE DOMINANT MEDIA ACTIVITY

THE NEXT BIG WINNERS IN STREAMING AUDIO ARE ALREADY (QUIETLY) HERE

THE LONG-AWAITED CORD CUTTING MOMENT IS STILL FAR OFF

THERE IS A "CABLE KILLER" COMING, BUT IT WON'T LOOK LIKE YOU EXPECT

E-SPORTS & WAGERING WILL CHANGE THE GAME IN GAMING

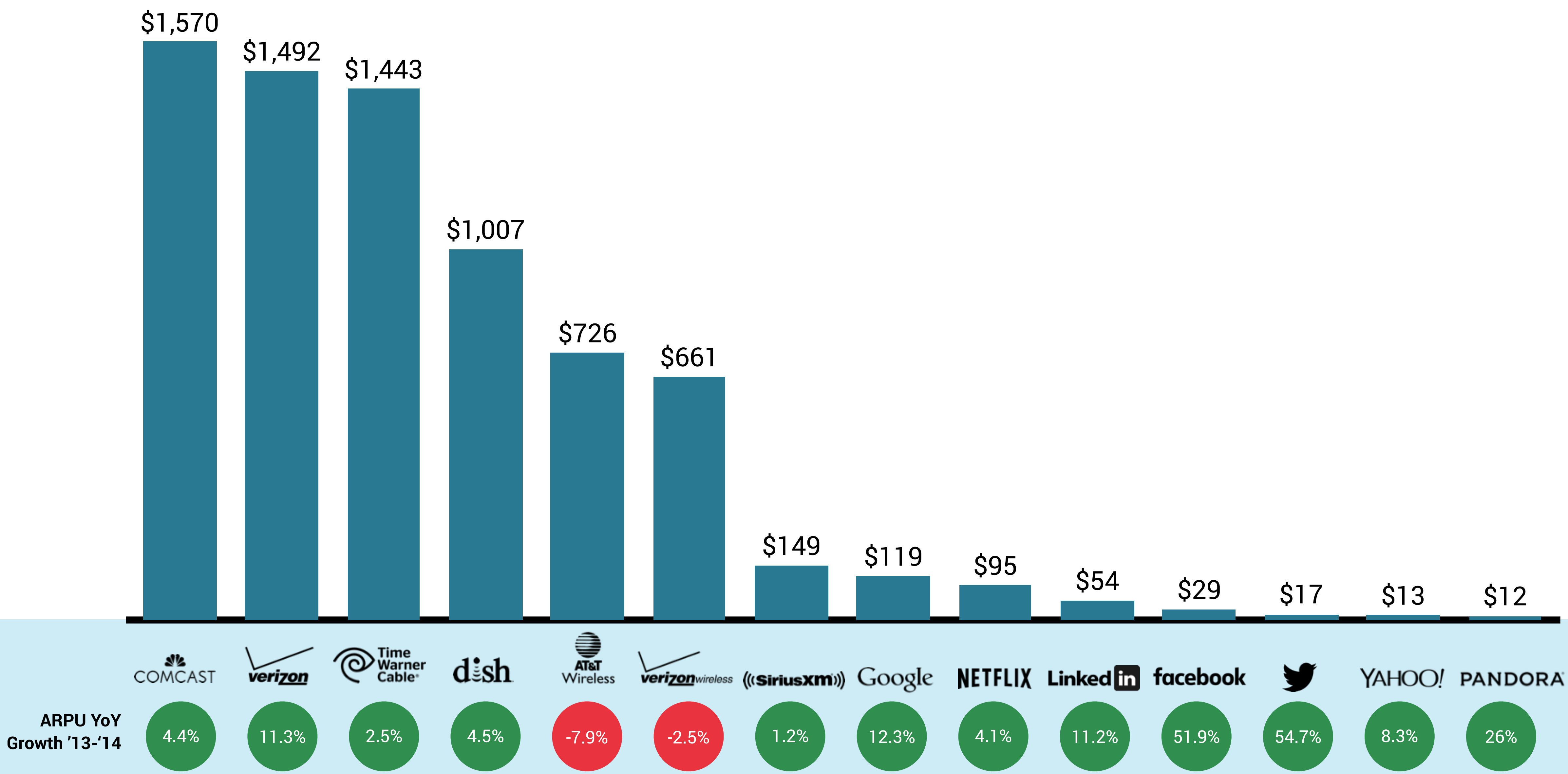
GOOD LUCK GETTING RICH IN THE APP STORE!

THESE COMPANIES ARE GRABBING ALL THE MONEY IN CONSUMER TECH & MEDIA

ONE SIMPLE WAY TO PREDICT WHAT TECH & MEDIA PLAYERS WILL DO NEXT TO COMPETE

Not surprisingly, the Pay TV providers continue to capture the highest average revenue per user in the U.S.

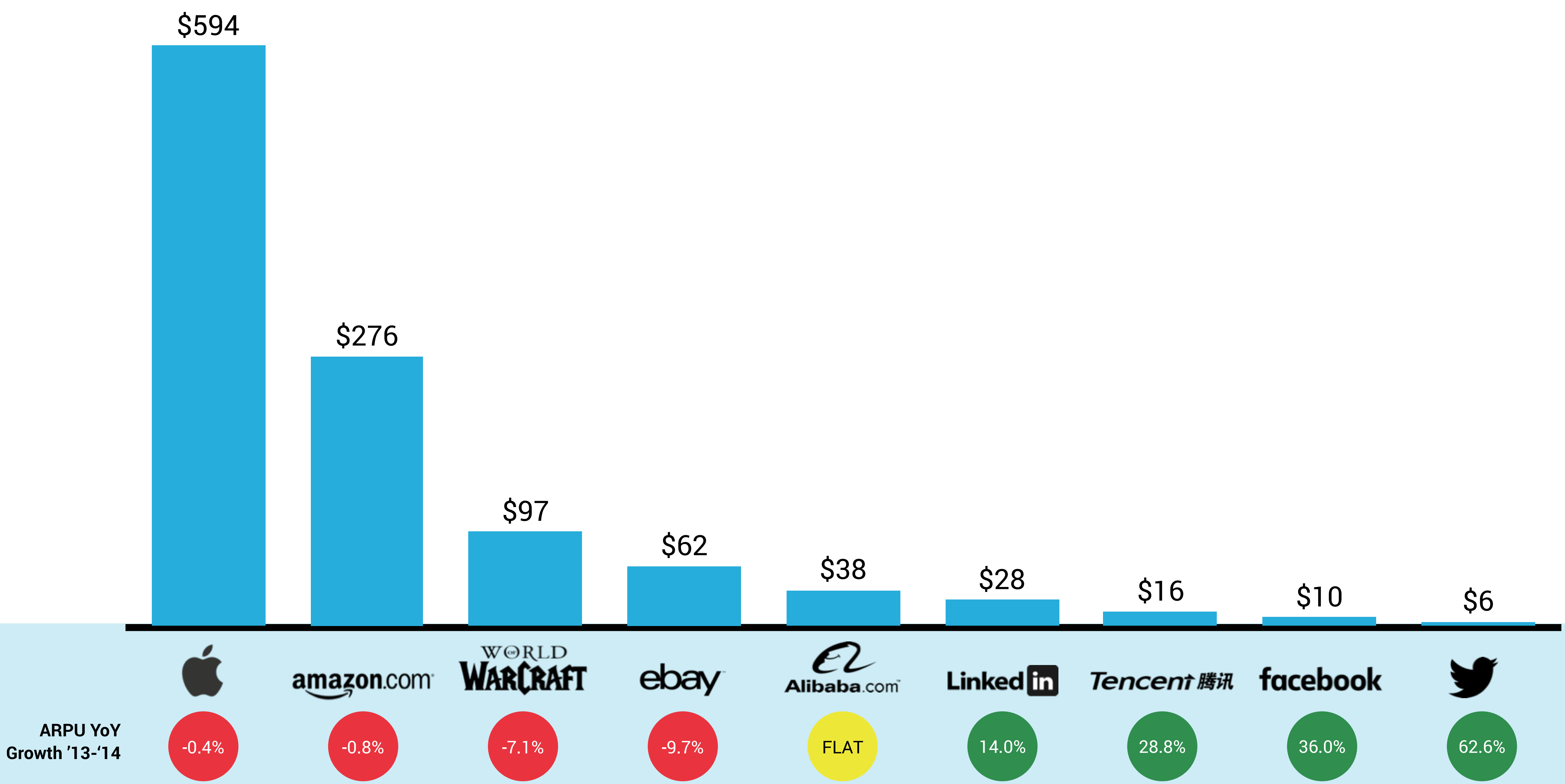
Annual ARPU: U.S., 2014



Sources: Company financials, comScore, eMarketer, and Activate analysis. ARPU based on consolidated US revenues except: Comcast ARPU is based on Residential & Business Services and advertising within the Cable Communications division. Verizon Wired based of Consumer ARPU, and Wireless based off retail post-paid ARPU. TWC includes Subscription Revenue for Residential & Businesses services along with advertising, AT&T Wireless based on post-paid services. Netflix is streaming revenues only.

Globally, wide range of growth and average revenue per user across consumer tech and media companies

Annual ARPU: Global, 2014



Sources: Company financials, comScore, and eMarketer, Activate analysis. ARPU based on consolidated global revenues except: Apple ARPU is for equipment sales (excludes accessories and apps), Amazon excludes services.

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The Tech & Media world is evolving into an increasingly unified stack

ORIGINAL CONTENT	VIDEO
	GAMES
	AUDIO
	EDITORIAL
SERVICES	CONTENT DISTRIBUTION
	AD TECH
	MESSAGING
	CONTENT TECH
	PAYMENTS & WAGERING
	ENTERPRISE & STORAGE
	OS & APP STORE
	SEARCH & INTELLIGENT AGENTS
PRODUCTS	**INTERNET OF THINGS**
	MOBILE AND PERSONAL COMPUTING
	GAMING AND STREAMING
CHANNELS	**COMMERCE / MARKETPLACE**
	DELIVERY / ON-DEMAND
	CONNECTIVITY

Sources: Activate analysis

Not surprisingly, all of the major players are trying to solve many of the same problems and attempting to play in multiple layers

	U.S. BASED								ASIA		CHINA		
	amazon	Apple	COMCAST	Disney	facebook	Google	Microsoft	YAHOO!	SAMSUNG	SONY	Alibaba.com	Bai百度	Tencent 腾讯
VIDEO	•	•	•	•	•	•		•		•	•	•	•
GAMES	•			•			•	•		•			•
AUDIO	•	•		•		•				•	•		•
EDITORIAL			•	•				•			•	•	•
CONTENT DISTRIBUTION	•	•	•	•	•	•	•	•	•	•	•	•	•
AD TECH	•	•	•	•	•	•	•	•			•	•	•
MESSAGING		•			•	•	•	•			•	•	•
CONTENT TECH													
PAYMENTS AND WAGERING	•	•			•	•	•		•		•	•	•
ENTERPRISE & STORAGE	•	•				•	•		•	•	•	•	•
OS & APP STORE	•	•				•	•		•		•	•	•
SEARCH & INTELLIGENT AGENTS						•	•	•			•	•	•
INTERNET OF THINGS	•	•		•	•	•	•		•	•	•	•	•
MOBILE & DEVICES	•	•		•		•	•		•	•			
GAMING & STREAMING	•	•	•	•		•	•		•	•	•	•	•
COMMERCE / MARKETPLACE	•	•		•		•	•		•	•	•	•	•
DELIVERY / ON-DEMAND	•					•					•	•	•
CONNECTIVITY			•			•							

Sources: Activate analysis

WE CAN ANTICIPATE THE NEXT STRATEGIC MOVES OF MAJOR CONSUMER TECH AND MEDIA PLAYERS BY IDENTIFYING THE LAYERS THEY'RE MISSING

Expect the next wave of M&A activity to be driven by larger players looking to fill in the gaps with the independent players

KEY INDEPENDENT PLAYERS IN EACH LAYER

VIDEO	hulu, BuzzFeed, VICE, Vessel, DEFY Media, WorldStar
GAMES	Arkadium, King.com, Nintendo, Ubisoft, Nexon, GungHo, T2, zynga, Kabam
AUDIO	Slate, Carolla Digital, Gimlet, TWiT, Scribd, SoundCloud, Mixcloud, bandcamp, Shazam
EDITORIAL	POLITICO, Gawker, Mashable, Vox Media, Drudge Report, Mode Media, Purch, Complex, Upworthy, Medium
CONTENT DISTRIBUTION	PLUTO, Victorious, Spotify, Machinima, TIDAL, PANDORA, iHeartRADIO, EVOLVE MEDIA, VProud.tv
AD TECH	rubicon project, DataXu, collective, TubeMogul, YuMe, xAd, videology, OpenX, AdRoll, appnexus, TURN, MediaMath, Teads, acxiom
MESSAGING	snapchat, Viber, Tango, kik, KakaoTalk, Blink!, Yik Yak
CONTENT TECH	brightcove, AUTOMATTIC, SQUARESPACE
PAYMENTS & WAGERING	stripe, DWOLLA, MobiKwik, TransferWise, WePay, iZettle, adyen, coinbase, Betable, skillz
ENTERPRISE & STORAGE	slack, Dropbox, tableau, Qlik, INFORMATICA, box, birst, HubSpot, GitHub
OS & APP STORE	Limited
SEARCH & INTELLIGENT AGENTS	Limited
INTERNET OF THINGS	JAWBONE, fitbit, Withings, estimote, proteus digital health, VALENCELL, Jibo, MISFIT
MOBILE & DEVICES	Limited
GAMING & STREAMING	Razer, LEAP Motion, Roku, LYTESHOT, FOVE
COMMERCE / MARKETPLACE	Etsy, Nasty Gal, Boxed, deliv, POSHMARK, curbside, shyp, Vistaprint, gettyimages, shutterstock, Bankrate, yelp, The Honest Company
DELIVERY / ON-DEMAND	lyft, POSTMATES, thumbtack, TaskRabbit, Elance, Blue Apron, Handy, grubHub
CONNECTIVITY	Limelight Networks, ENCOMPASS Digital Media

Sources: Activate analysis

COMPANIES THAT CAN'T BUY THEIR WAY INTO A LAYER OF THE STACK WILL TRY TO "OVERLAY" IT

BIG PLAYERS MAY ATTEMPT TO ENTER NEW LAYERS BY USING THEIR MARKET STRENGTH IN ADJACENT LAYERS RATHER THAN THEIR DEEP POCKETS.

Major technology players and upstarts are already implementing an overlay strategy for fiercely competitive layers

Google Now, Apple Siri and Microsoft Cortana overlay other search and messaging layers by providing a user interface which bypasses competitors' services completely

Amazon Echo overlays Internet of Things products from other companies, forming an intermediary layer that lets Amazon retain control over the user experience of those devices

Slack's unified search doesn't just provide access to chat messages in Slack, but the contents of files in apps that are connected to Slack, overlaying productivity software in adjacent layers

Microsoft Office 365 is now available on every operating system, overlaying platforms like Android and iOS with an enterprise layer that Microsoft controls

Apple TV overlays the offerings of cable companies and over the top video providers by adding an interface which can search for content without regard for its source, putting control in Apple's hands

THANK YOU !

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Activate: We are the leading strategy consulting firm for technology, media, entertainment and information companies

Activate works with CEOs, senior management teams and principal investors to drive growth and position their companies to win in the dynamic tech and media ecosystem.

We help our clients develop strategies to grow their businesses and capture the opportunities from the innovation and invention reshaping these industries.

GROWTH STRATEGY

Define overall strategic plans and roadmaps for growth. Identify and exploit new opportunities. Take advantage of innovation, platforms, businesses, content and technology.

DIGITAL STRATEGY

Formulate strategies and identify opportunities to enable tech and media companies to create new and engaging user experiences, products and services that underpin new growth businesses, revenue streams and audiences.

NEW BUSINESSES AND PRODUCTS

Create new businesses as 'virtual startups' within large companies. Leverage content, technology and experiences to take advantage of the native capabilities of devices and platforms.

PRICING

Develop new pricing structures and strategies to grow revenues from consumers and b-to-b customers. Activate's areas of expertise include: advertising, subscription, packages and fees, ticketing, payments, e-commerce, and products.

SALES AND MARKETING EFFECTIVENESS

Position the sales force to grow revenue: organization, incentives and coverage model; advertiser revenue management; new category and customer development; consumer and b-to-b marketing.

STRATEGIC DUE DILIGENCE

Bring industry expertise and track record in enhancing business performance to help strategic acquirers and private equity firms assess assets and determine how to create value.

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