



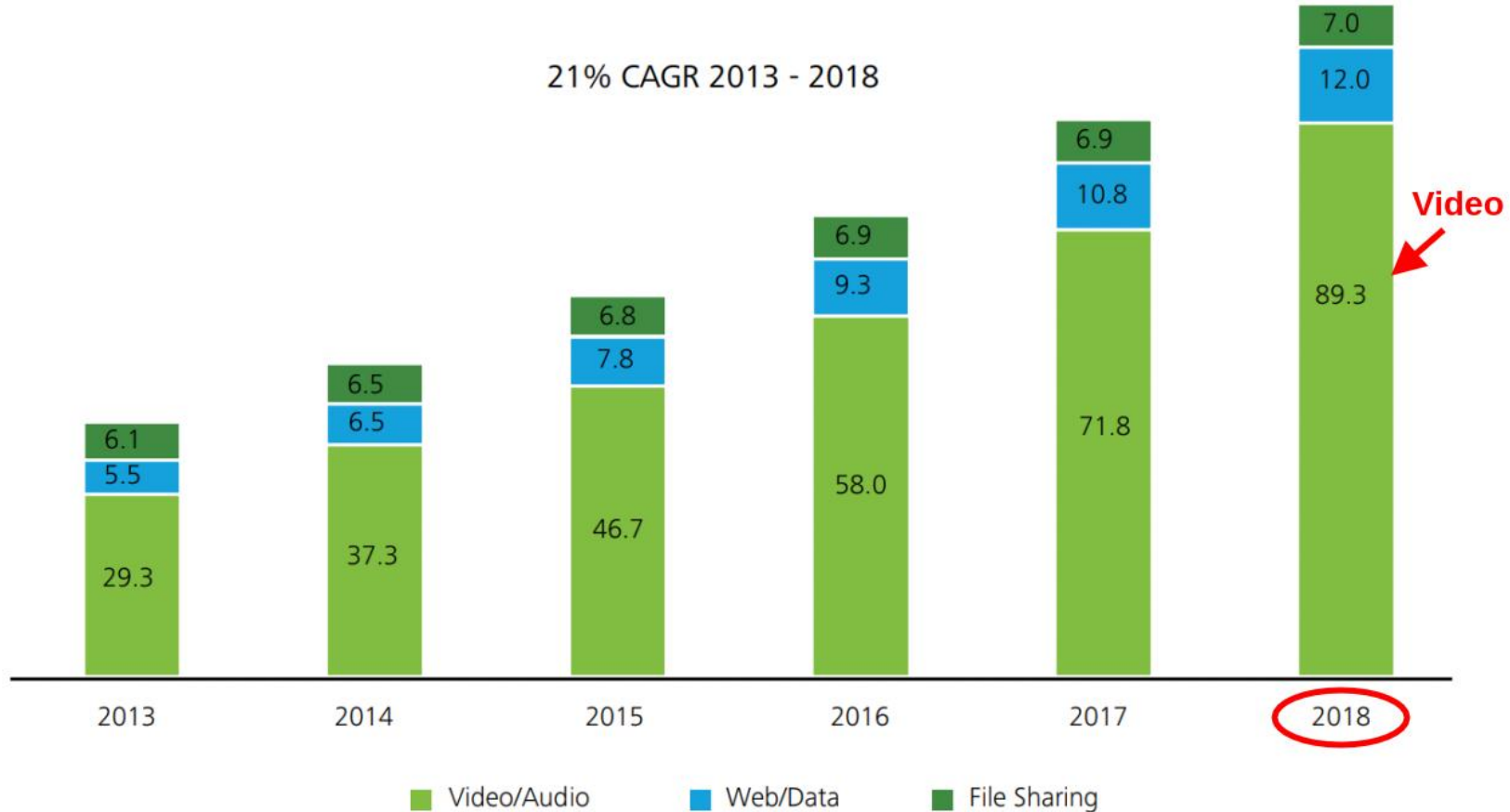
Video Ecosystem and some ideas about video big data

Trieu Nguyen - Head of Platform at Blueseed Digital
My personal email: tantrieuf31@gmail.com

Agenda

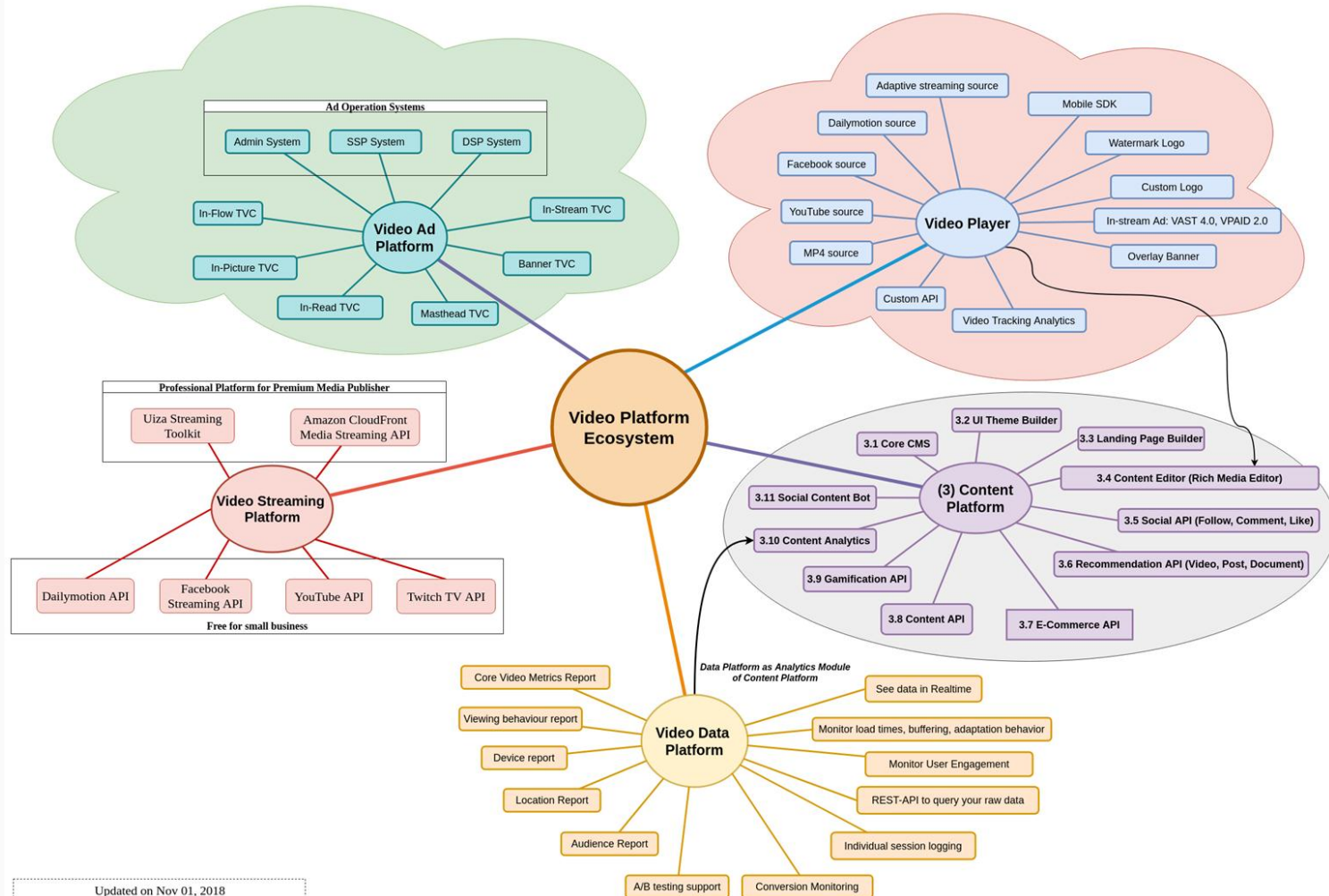
1. Introduction to Video Ecosystem Mind Map
 - a. Video Streaming Platform
 - b. Video Ad Tech Platform
 - c. Video Player Platform
 - d. Video Content Distribution Platform
 - e. Video Analytics Platform
2. Summary of key ideas
3. Q & A

Figure 2 : Video and Audio will generate 89% of Consumer Internet Data Traffic by 2018 (Exabytes per month)



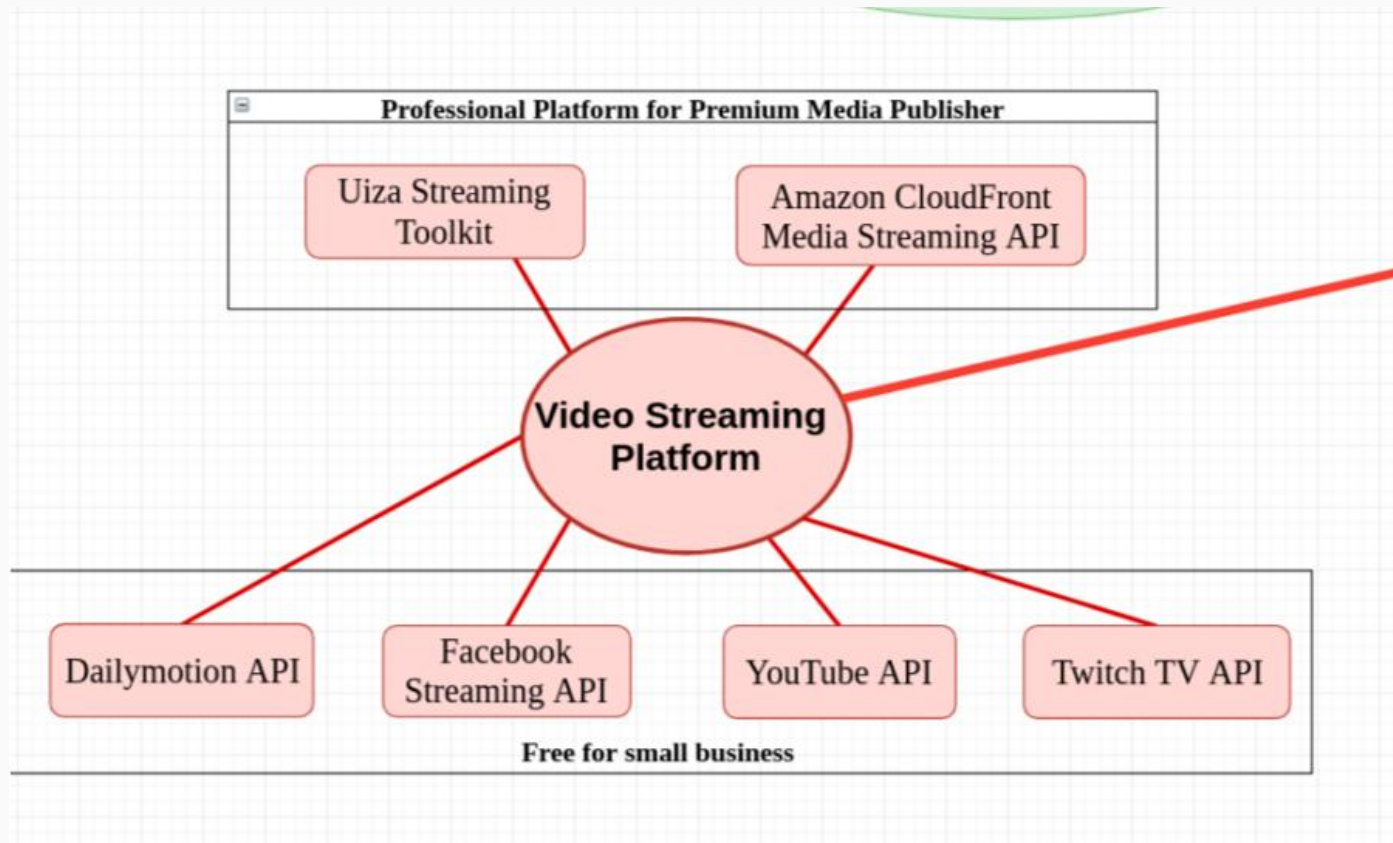
The value of video content

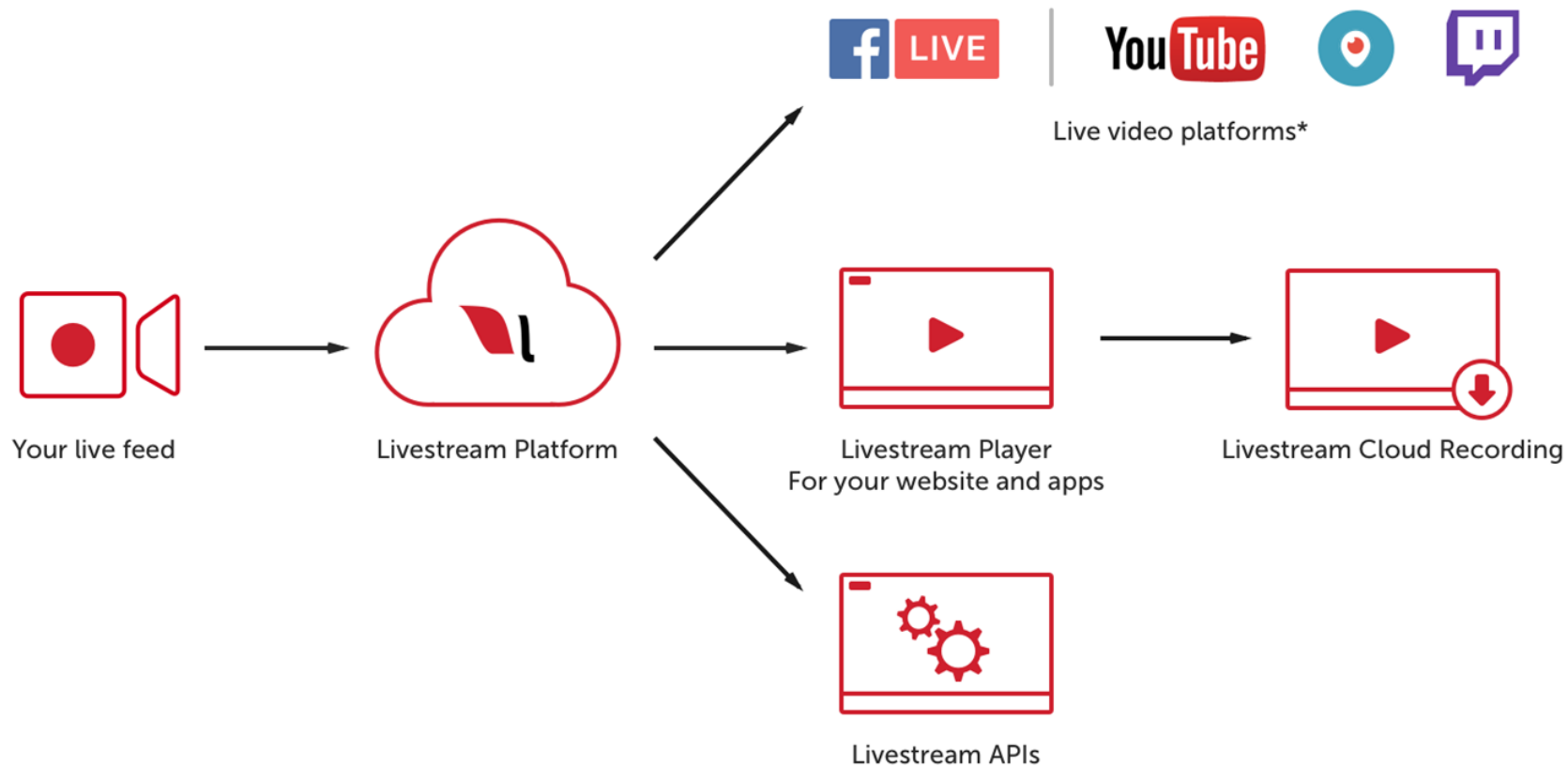
1. Retain user loyalty with multimedia content
2. Builds the volume of user traffic very fast
3. Delivers best content UX to your user
4. Give your business a wider marketplace

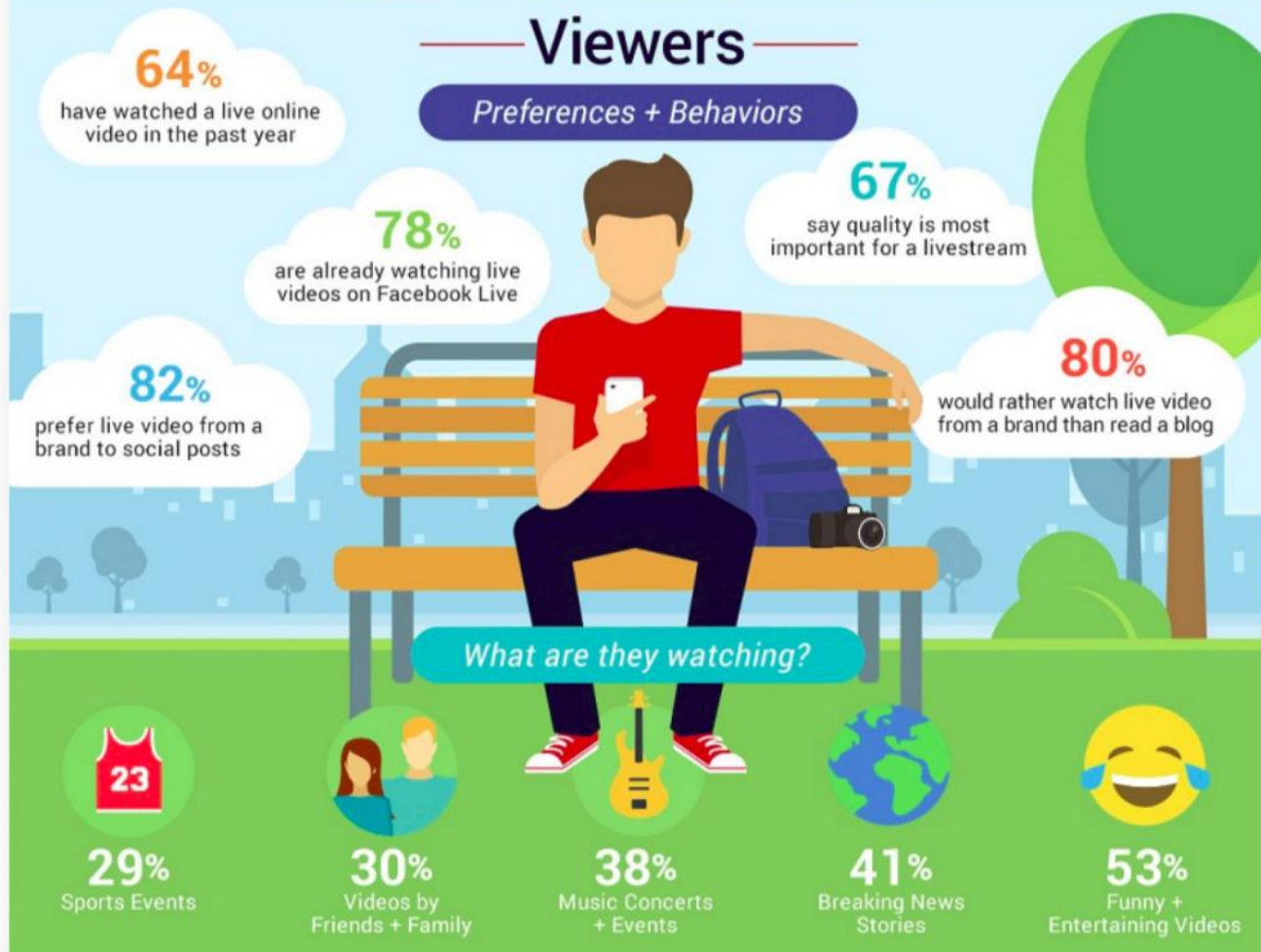




(1) Video Streaming Platform



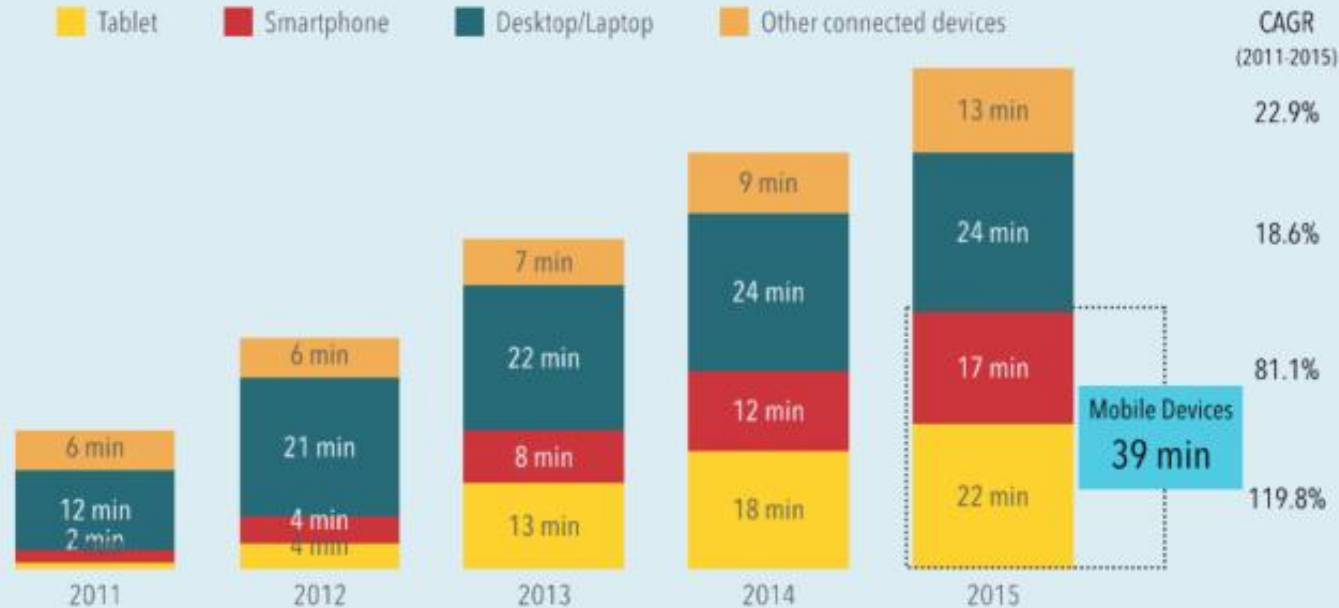




People spend more time with mobile video

Average time spent per day with online video by device type

time spent watching videos in minutes by device type



Streaming Services

Content providers offer streaming services based on their business models and type of service.

OTT aggregators: Offer a range of content from multiple providers delivered over the internet (i.e. Netflix/Hulu/Amazon prime video) without the involvement of a multi-system operator (MSO, i.e. Cox Communications/Comcast/Charter Communications). You can access this type of content without having a cable subscription.

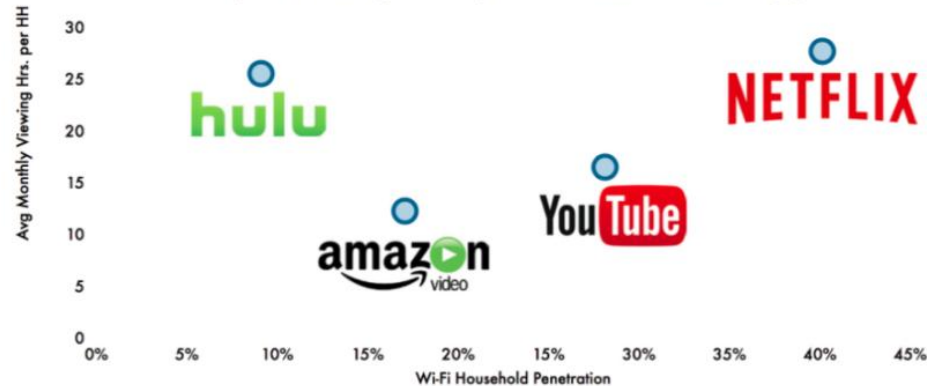


According to comScore's OTT Intelligence Report December 2016, Netflix leads the major over-the-top streaming services in both household penetration and viewing engagement.



Netflix Leads the Major Over-the-Top Streaming Services in Both Household Penetration and Viewing Engagement

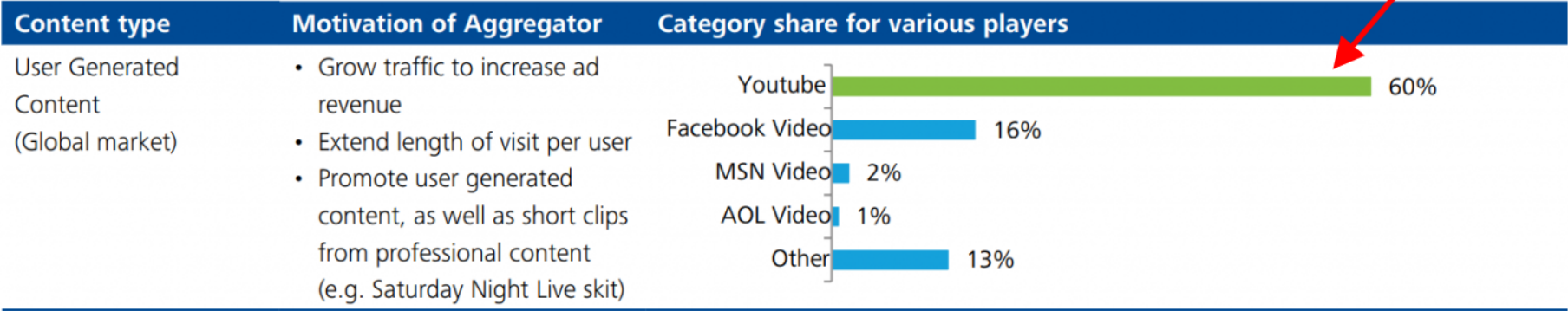
Selected Over-the-Top (OTT) Streaming Services by Wi-Fi Household Penetration & Engagement



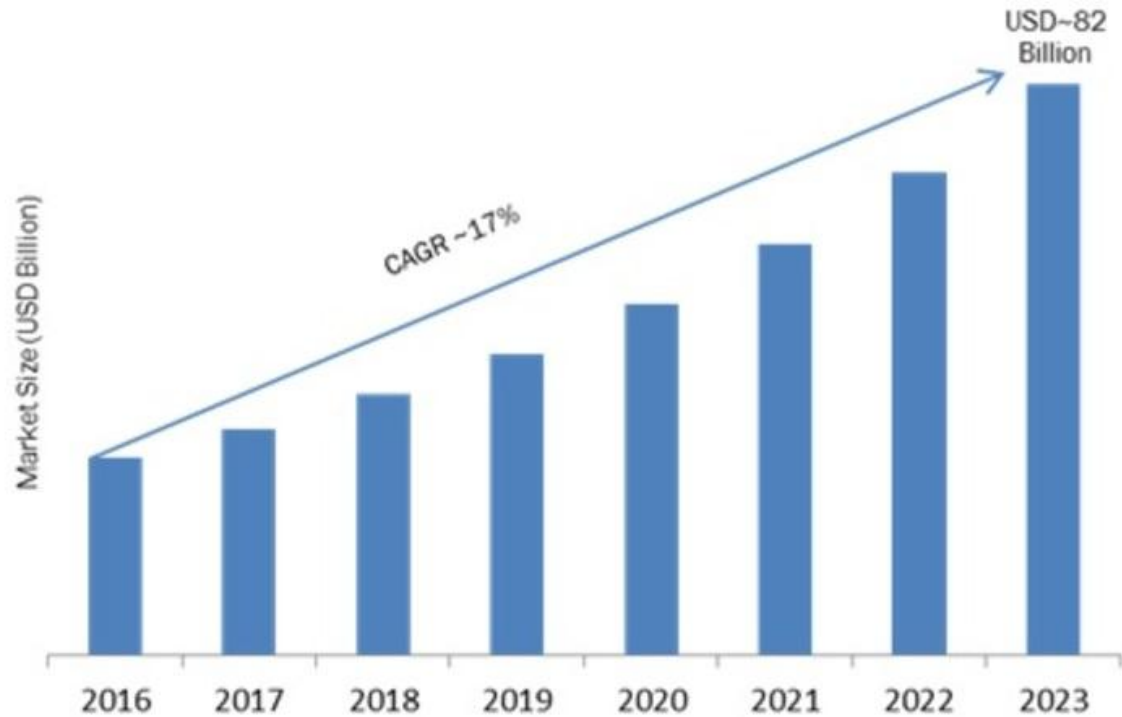
Source: comScore OTT Intelligence, U.S., December 2016

OTT standalone services: Offers content delivered from one provider directly to the consumer over the internet

Figure 14 : Winner takes all economy is prevalent in the digital market



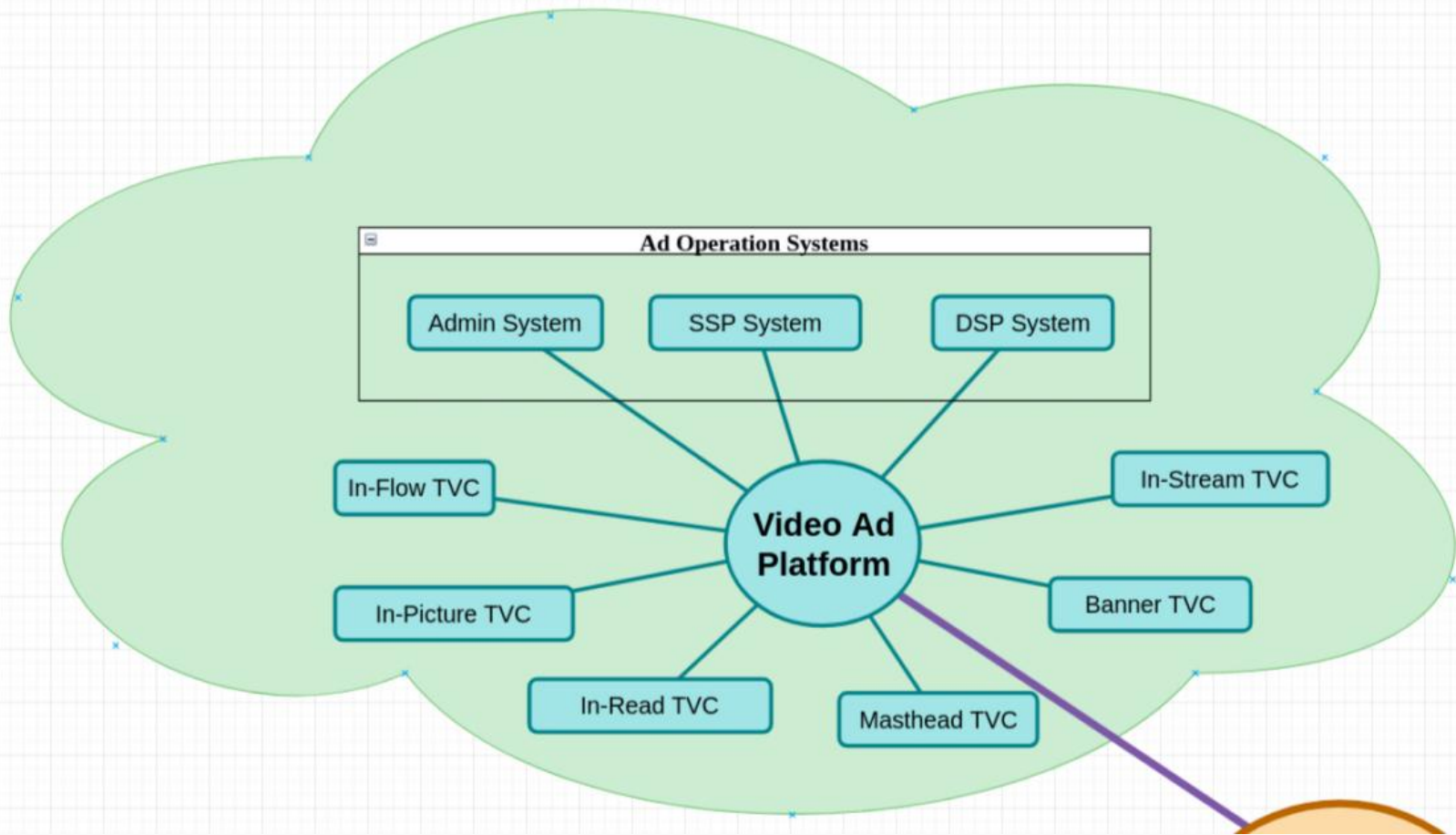
Video Streaming Market Research Report- Global Forecast 2023

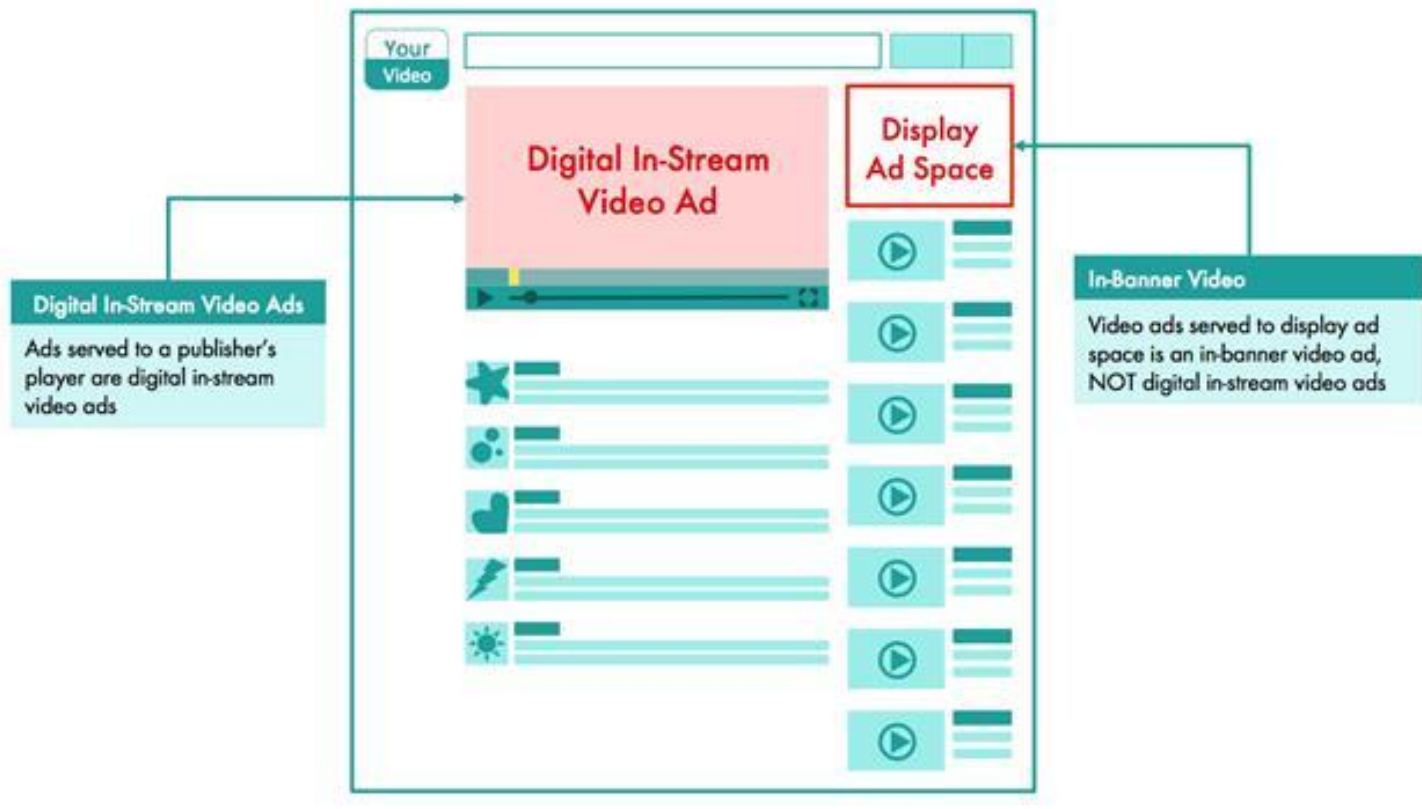


<https://www.marketresearchfuture.com/reports/video-streaming-market-3150>



(2) Video Advertising Technology Platform





How Video is used for Digital Market → Aha: Viral Clip

Topics



Fashion



Beauty



Health



Entertainment



Food



Work & Money



Tech



Politics

Distribution



Podcast



Youtube



R29 Tv



Instagram



Facebook



Events



Newsletter



Site



Snapchat

Craft



Editorial



Photo



Design



Video



Talent



Research



Product

- Browser Search
- Email
- Mail
- SMS

Non-Personal



Personal



- In-Person
- In-Store
- Live Chat
- Presentations
- Telephone Customer Service
- Telephone Support
- Web-Cam

- Company Mobile Website
- Mobile App
- Mobile Browser Search

Mobile



Media



- Digital Advertisements
- News Feeds
- Publications
- Radio
- Reviews
- Television
- Traditional Advertisements

- Company Blogs
- Company Website
- Paid Search
- Search Engines

Web



Social



- Social Networks
- Social Media Advertising
- Social Media Promotion
- Social Media Thought Leadership
- Video
- Webinars

Omni-channel Marketing

Is YouTube a new TV, and compete directly with traditional TV ?



01

Tell us about your business

A YouTube-approved filmmaker will schedule a call with you to learn about your business, and help write a video script that appeals to potential customers.



02

We'll shoot your 30-second video ad

Your filmmaker will then visit your business to film your video ad. Within the next week, you'll receive an edited version ready to advertise on YouTube.



03

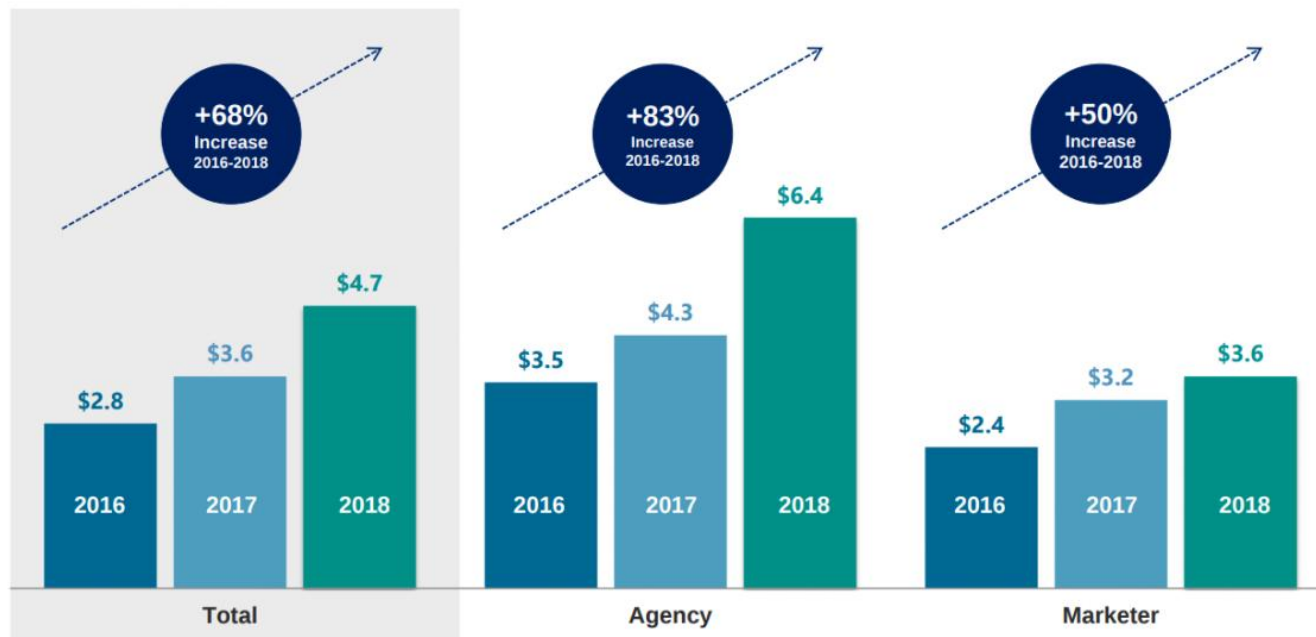
Your ad goes live on YouTube

One of our advertising experts will upload the video ad to your YouTube channel, and help set up your campaign so you start seeing results from your investment.

Annual spend on original digital video advertising continues to climb. Agencies significantly increasing their ODV investment

Average Dollar Amount Spent on Original Digital Video - 3 Year Trend (in millions)

● = % Change in Digital/Mobile Video Dollar Spend 2016 – 2018

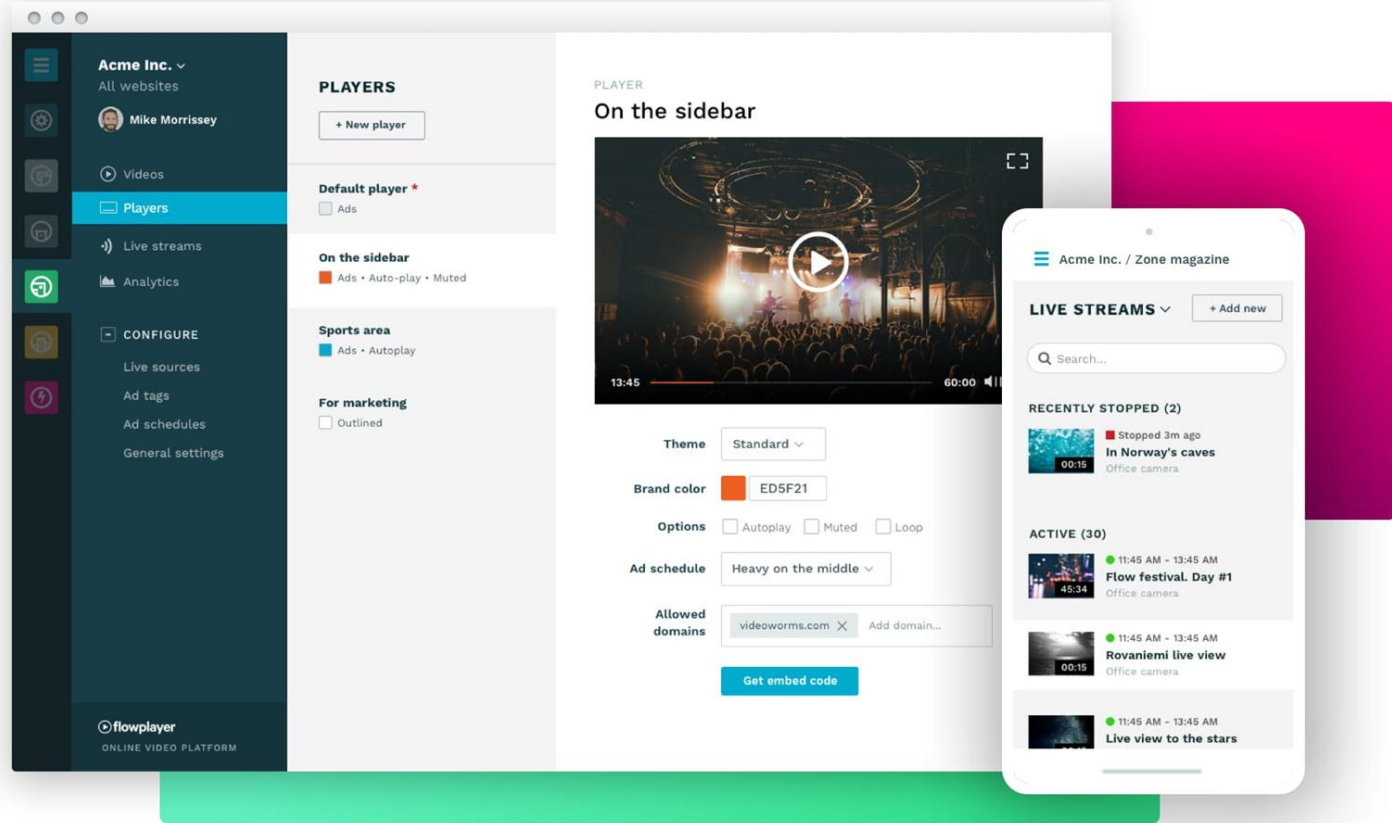


Q143: Previously you said your company will spend [INSERT RANGE] on digital video/mobile video in 2018. We'd like to get a bit more detail on that and prior year's spending. To the best of your knowledge, what exactly was that spending amount in 2016 and 2017? What do you anticipate spending in 2018?

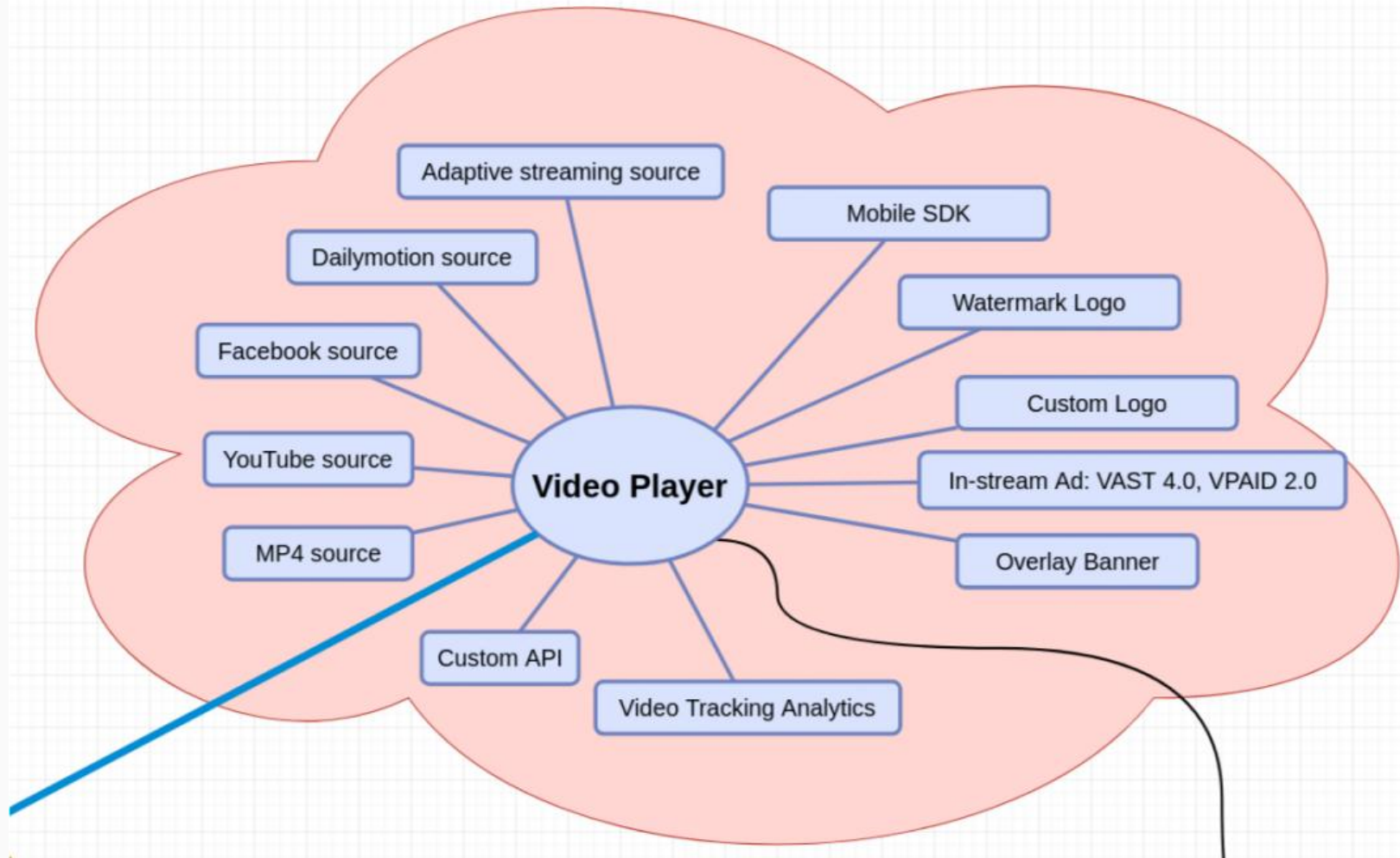
Q145: What portion of your total digital video advertising budget for [your company's/your client's] biggest most important product or service in the [MARKET SECTOR] market was spent advertising on each type of content in 2016 and 2017? And what do you anticipate those shares will be in 2018?

Base: Total Respondents





(3) Video Player Platform





Mobile ready

Built on HTML5 and CSS3



Flexible Use

Can play MP4 file, adaptive streaming source, YouTube video or Facebook video!



Ad-supported

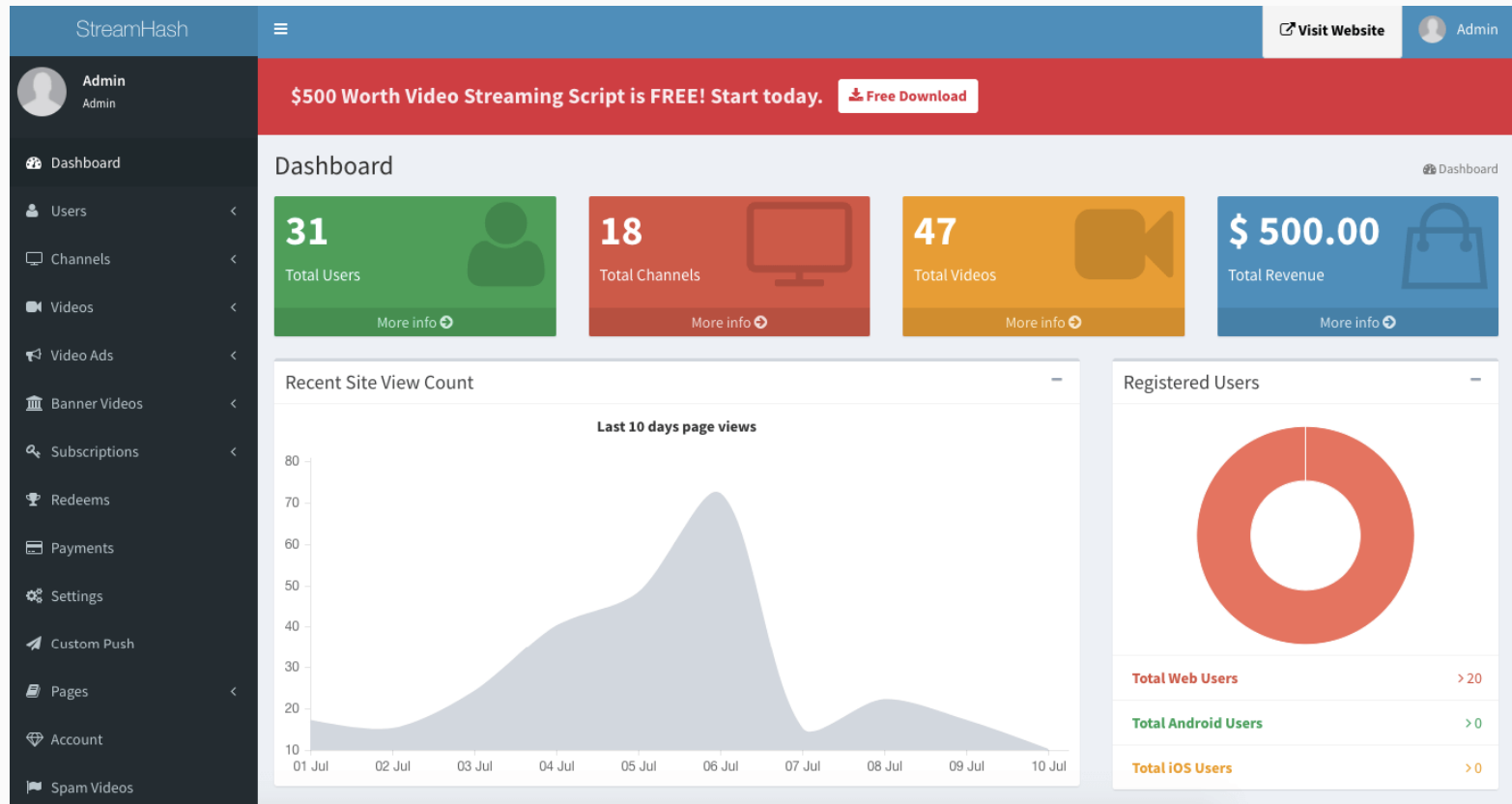
Support VAST 3.0, VPAID 2.0



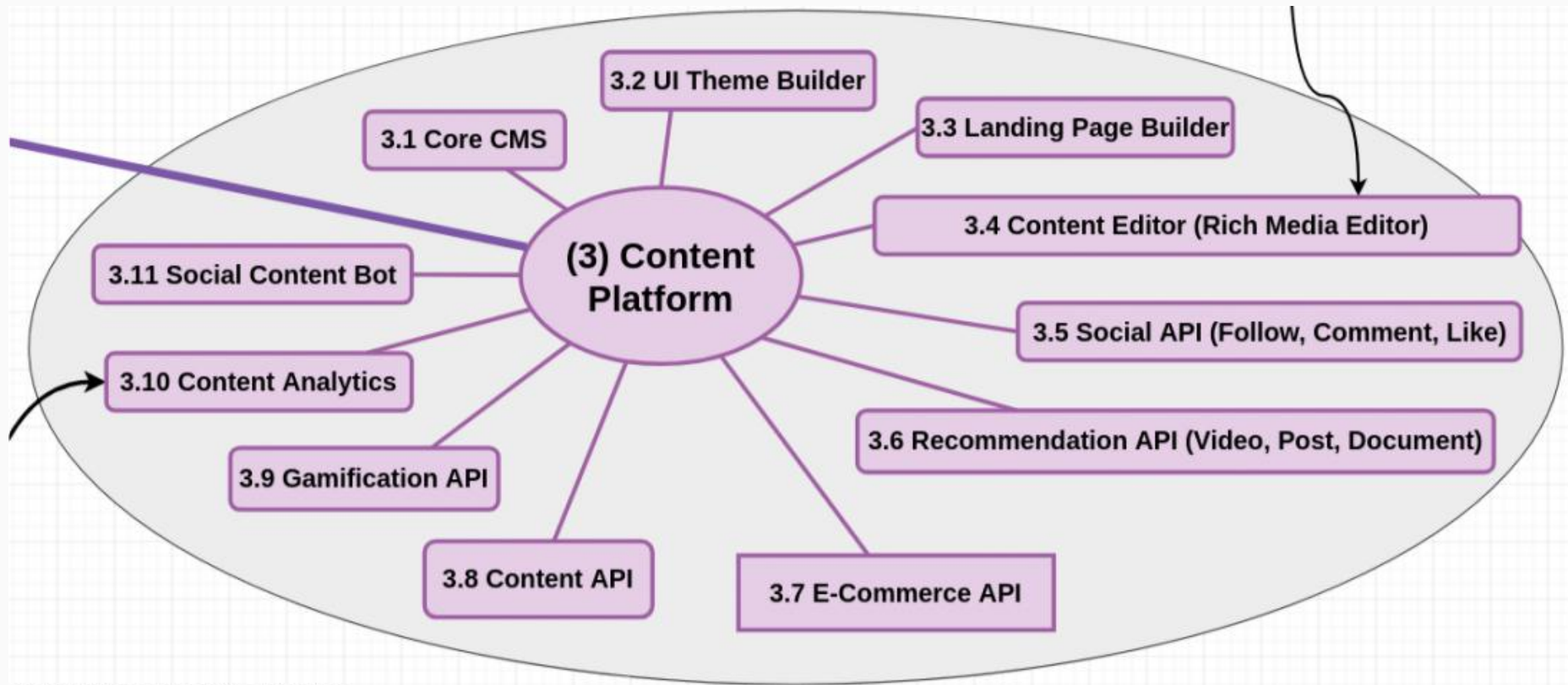
Rich API support

Support API for customization!

<http://MediaPlayer.one>



(4) Video Content Distribution Platform



How to Use On-Demand Content for Lead Generation



Lead generation is a tough game these days, and growing tougher by the day. The attention span of your audience out there is

- Content Creators
- Content Aggregators
- Labels & Publishers (Right holders)

- App developers
- Bandwidth providers (ISPs)
- Hardware providers
- Technology outsourcing partners
- Content Management Partners
- Analytics

- Partners with interested in similar customer segments e.g. m-commerce etc.
- ATL – TV, Print, Radio Partners
- BTL – Digital Campaign Partners
- Search Engine Marketing etc.

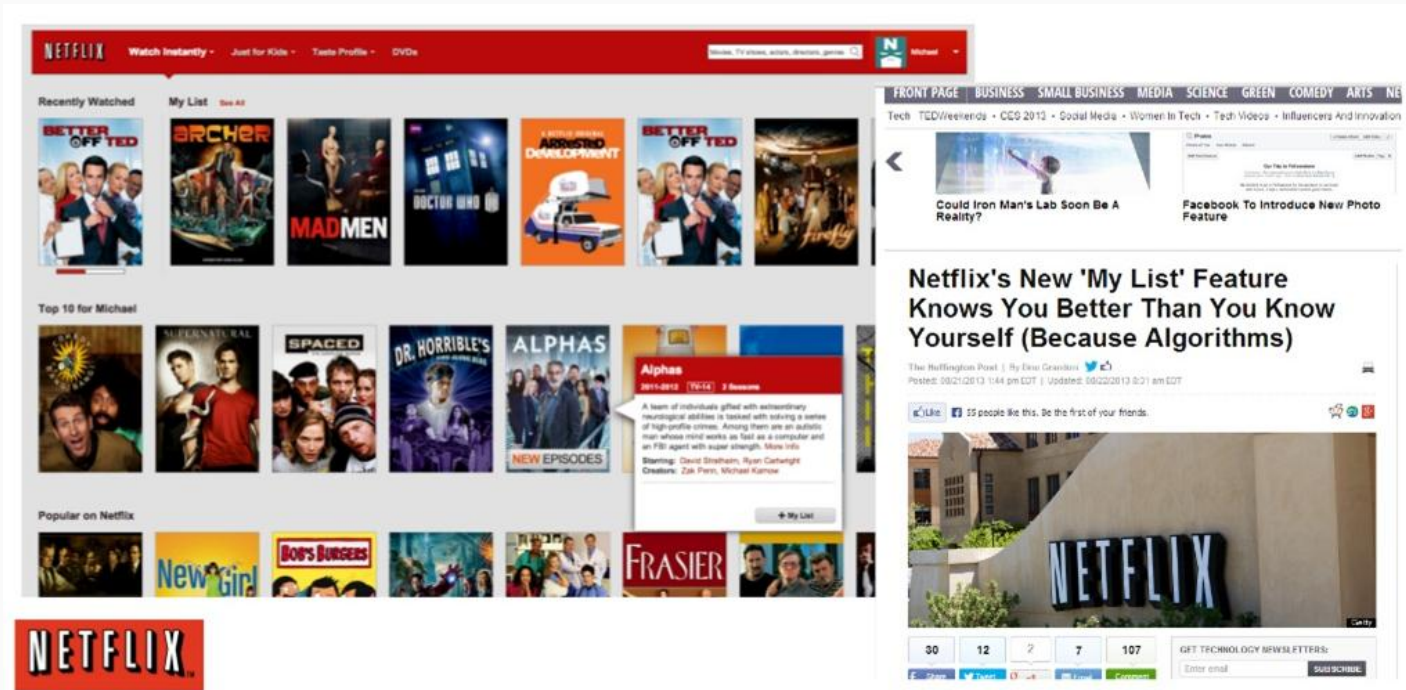


- App Stores
- Online Retail / e-commerce
- Retail
- Telecom Partners
- OEM Partners
- Data Pipe Providers

- Direct Advertisers
- Sponsors – for specific content
- Ad mediation platforms / agencies

- Over the top payment gateways
- Credit card, Debit Cards
- Net banking
- Mobile Wallet
- Telecom Wallet
- Retail Recharge

In Video Content Platform, the Recommendation Engine is key feature



<https://www.slideshare.net/xamat/qcon-sf-2013-machine-learning-recommender-systems-netflix-scale>

(5) Video Big Data Platform

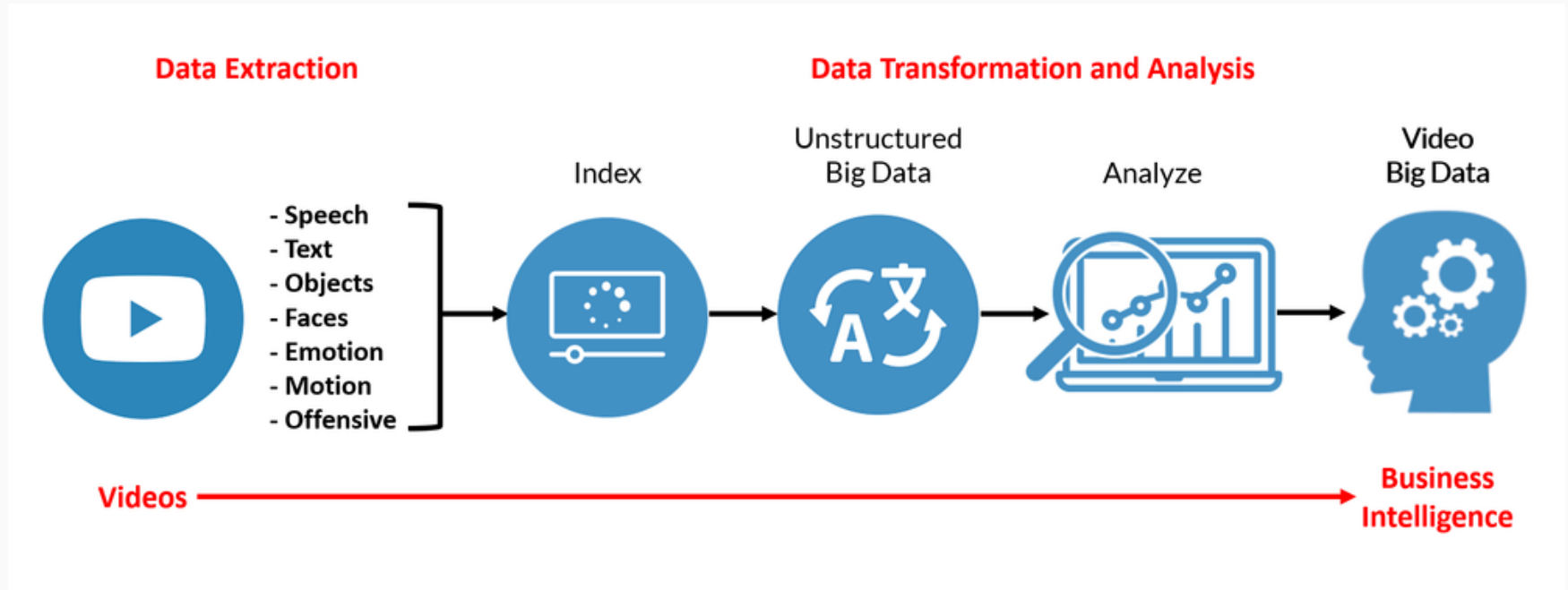
Video Analytics Platform

- i. What is Video Big Data ?
- ii. What is Visual Information Analytics and why ?
- iii. How can we extract value from video ?
- iv. How we design Video Big Data System ?

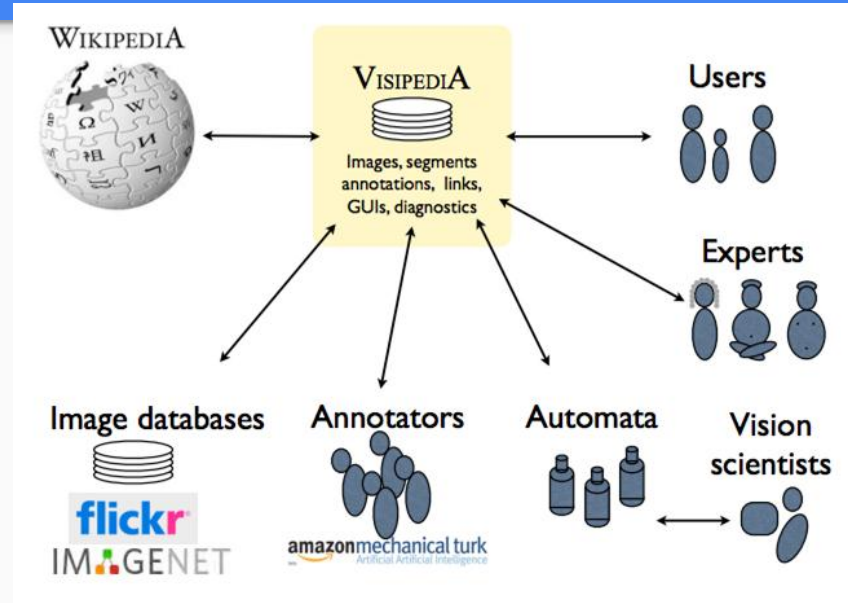
Video Big Data – Examples

- Netflix – “Other Movies You May Enjoy”
- YouTube – “Recommended Videos”
- Aventura security – “Cerebrus Intelligent Video Analytics”

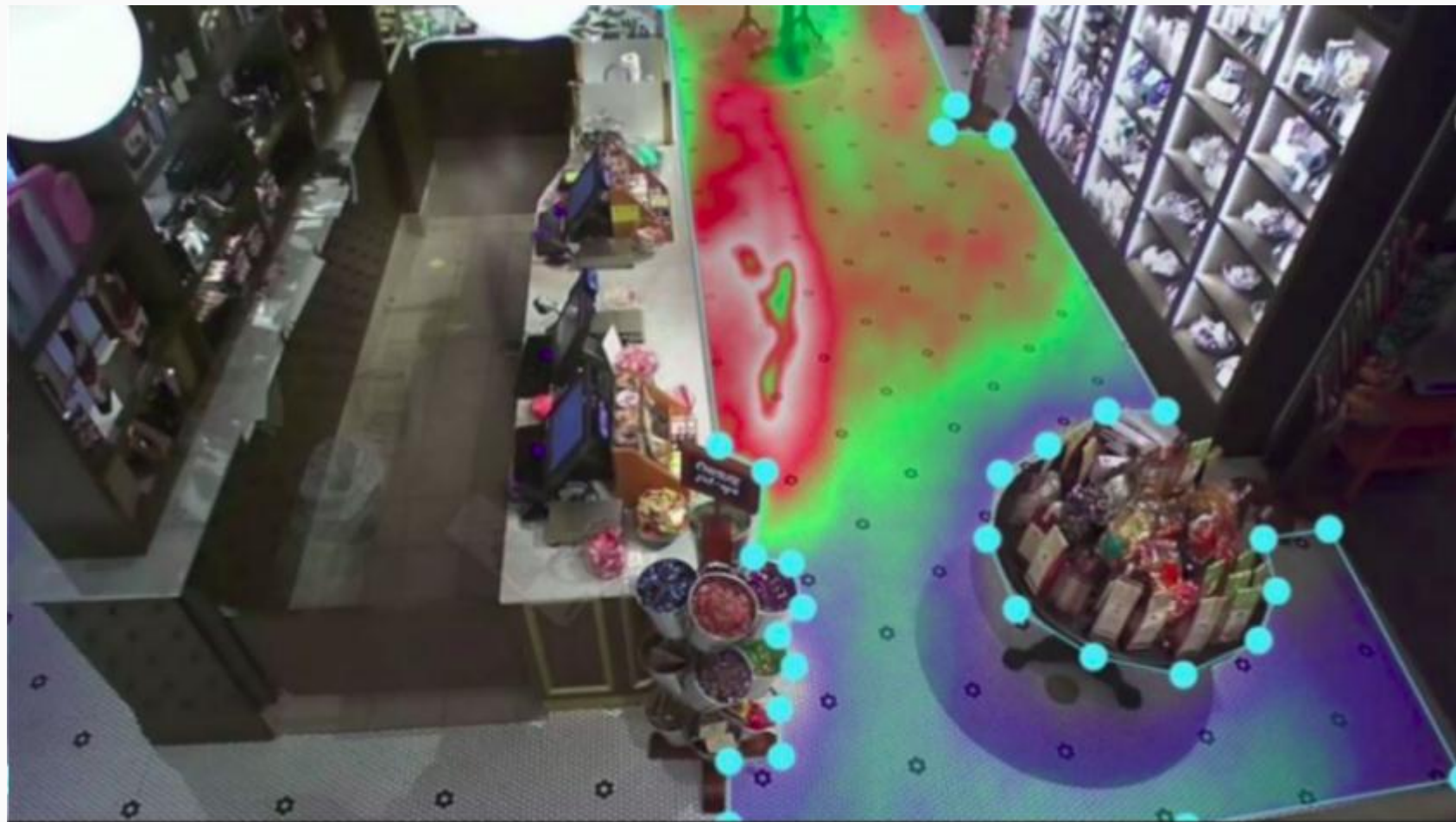
What is Video Big Data ?



Visipedia, short for “Visual Encyclopedia,”



Visipedia, is a network of people and machines that is designed to harvest and organize visual information and make it accessible to anyone anywhere (<https://visipedia.org>)



Deep Neural Networks for YouTube Recommendations

Paul Covington, Jay Adams, Emre Sargin
Google
Mountain View, CA
{pcovington, jka, msargin}@google.com

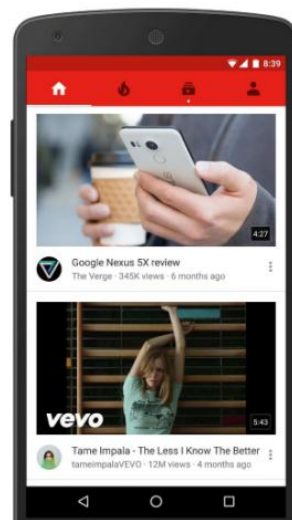
ABSTRACT

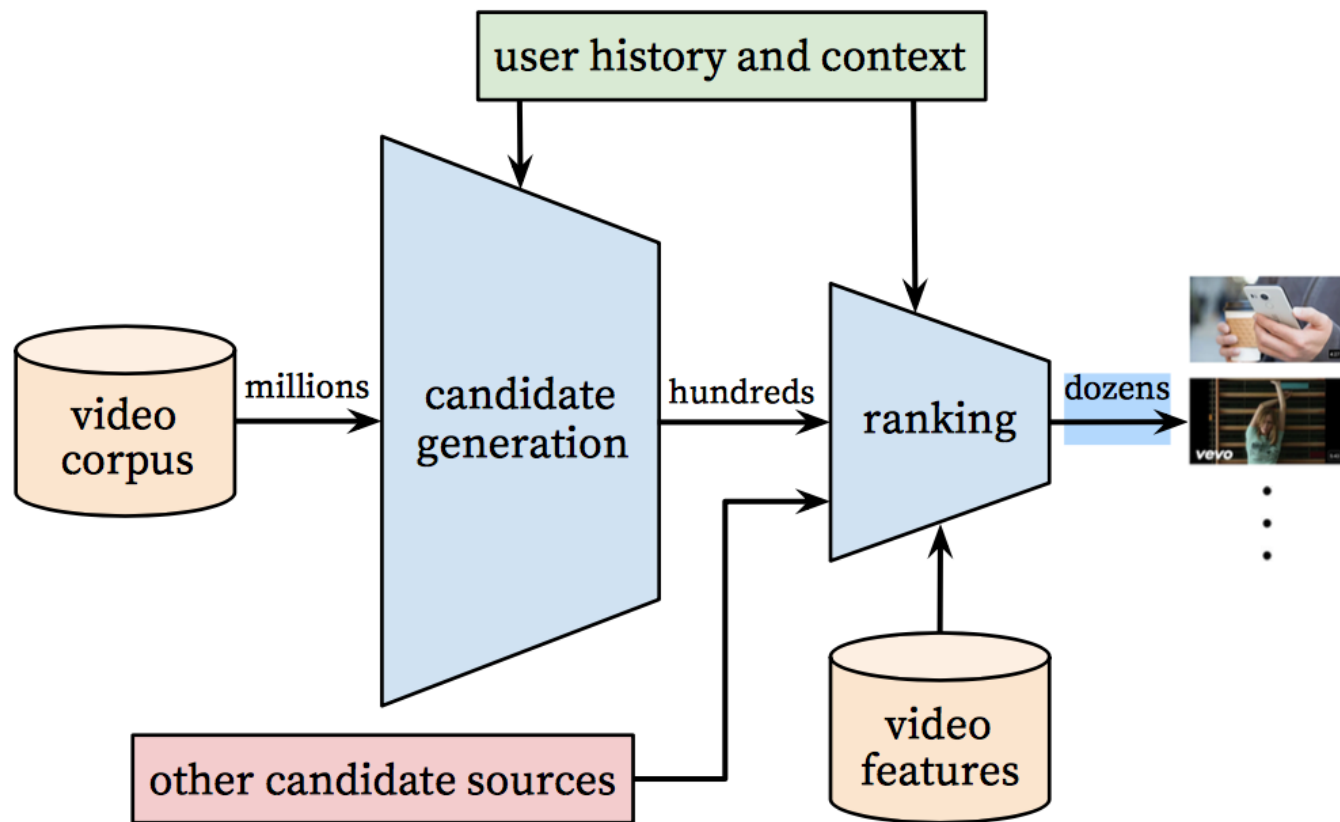
YouTube represents one of the largest scale and most sophisticated industrial recommendation systems in existence. In this paper, we describe the system at a high level and focus on the dramatic performance improvements brought by deep learning. The paper is split according to the classic two-stage information retrieval dichotomy: first, we detail a deep candidate generation model and then describe a separate deep ranking model. We also provide practical lessons and insights derived from designing, iterating and maintaining a massive recommendation system with enormous user-facing impact.

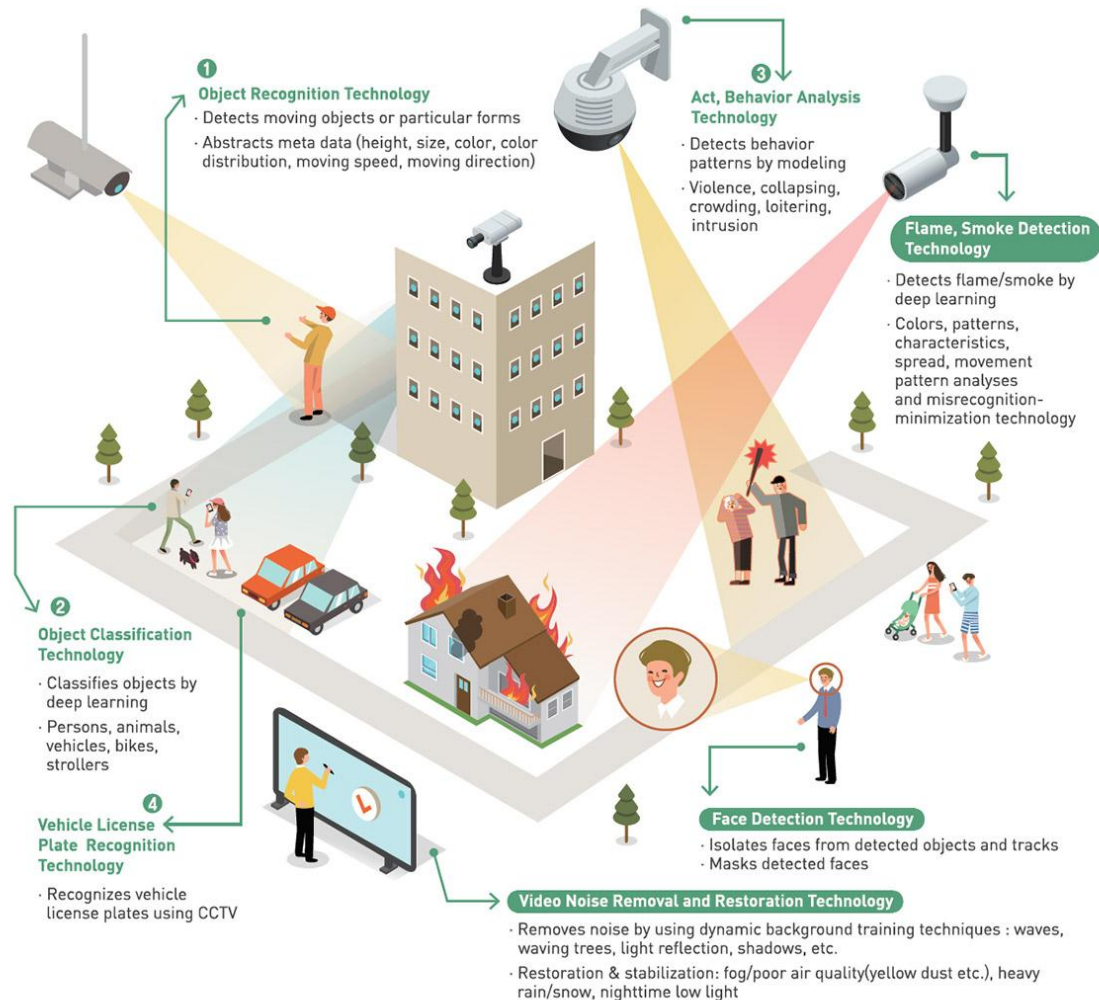
Keywords

recommender system; deep learning; scalability

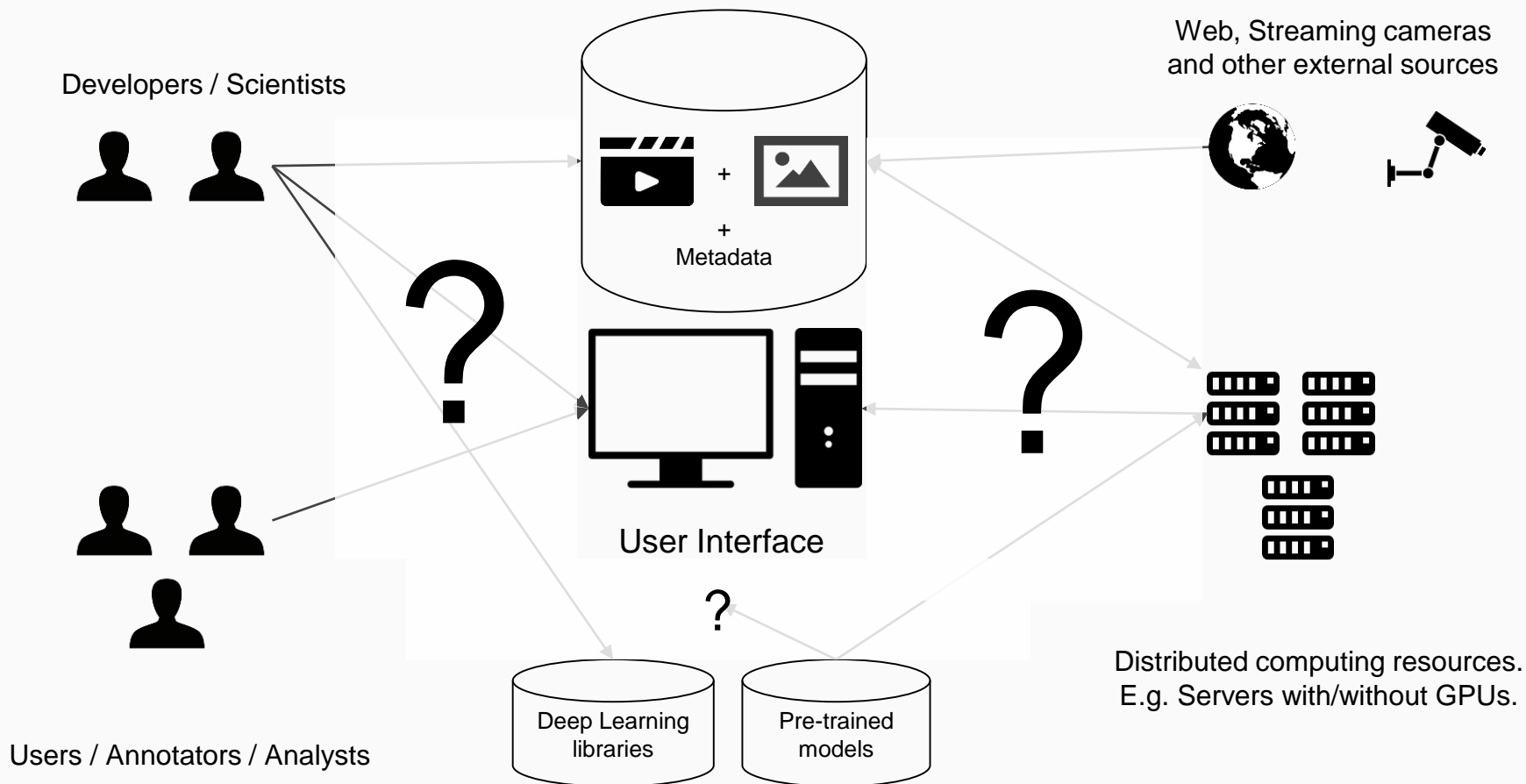
1. INTRODUCTION

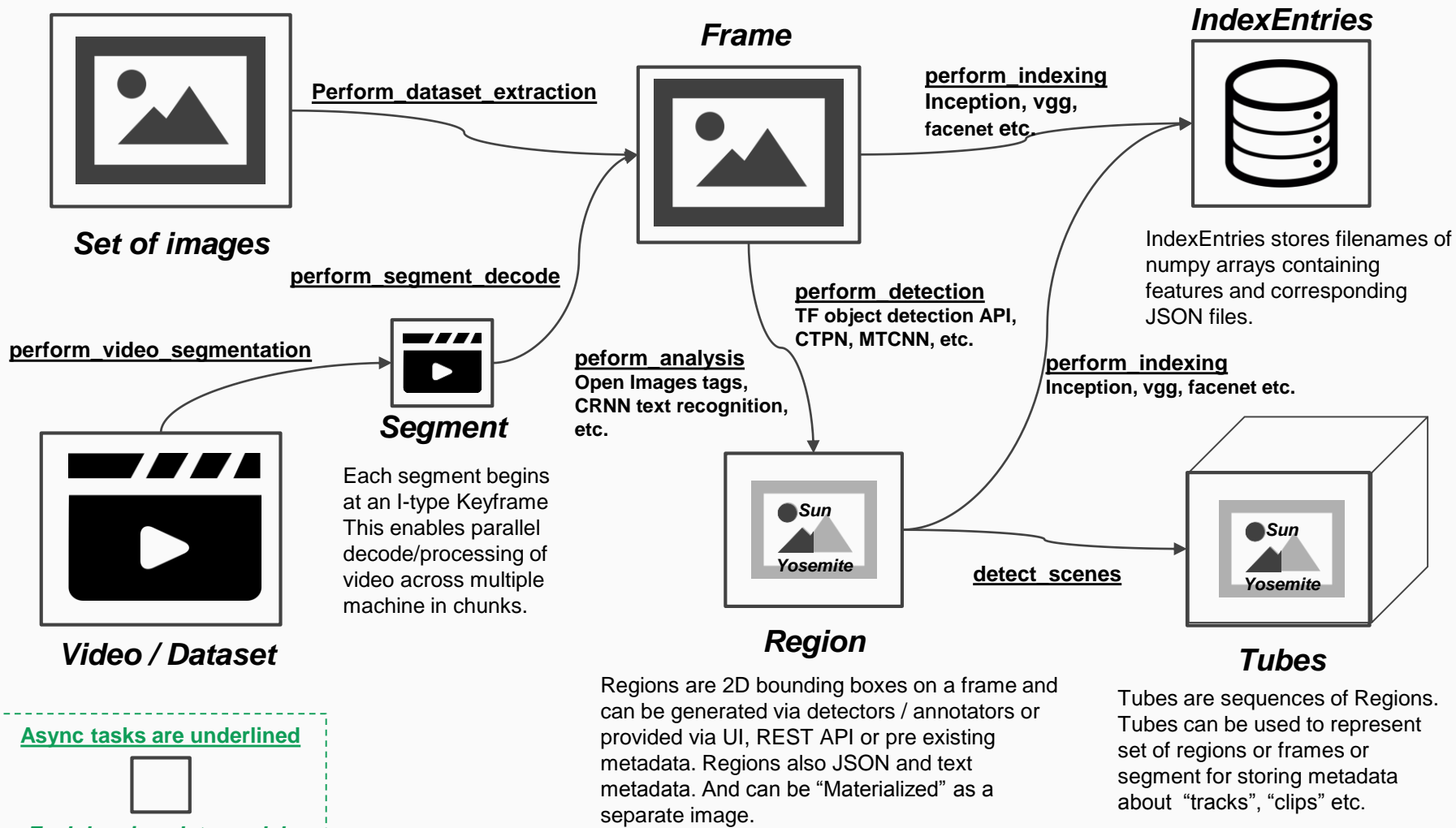




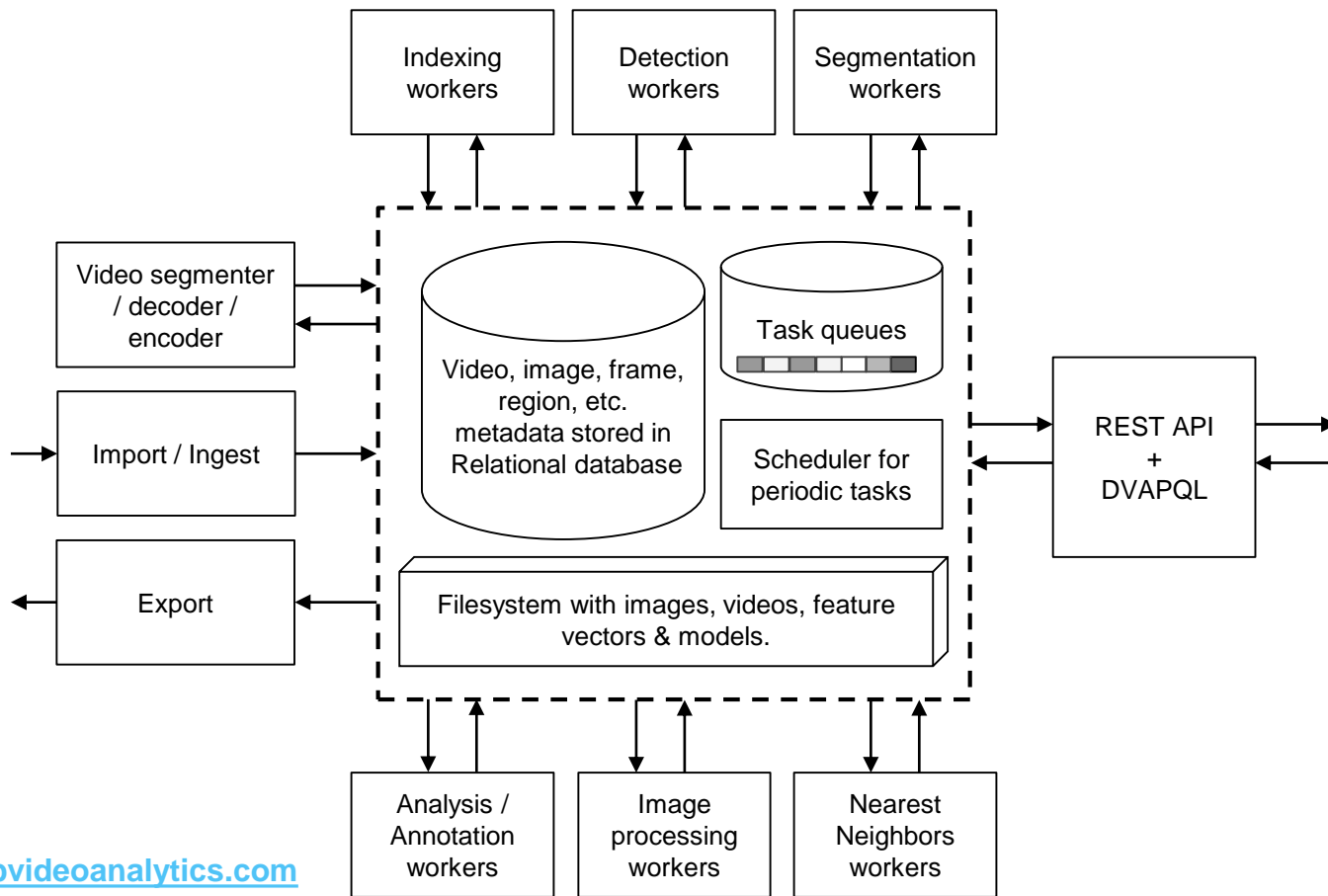


How do we structure Visual Data processing?











Data-centric Architecture for Video Big Data



Source:

<https://www.deepvideoanalytics.com>

Key takeaways

	Góp 4 TP.	HA NOI	DA NANG	HCM CITY	CAN THO
	87.3%	86.5%	98.4%	86%	97.2%
	28.9%	30.7%	37%	29.1%	14.8%
	26.4%	23.6%	14.5%	26.5%	45.5%
 FPT Play	8.2 %	8%	4.2%	7.3%	18.1%
	7 %	10.9%	23.5%	3.9%	2.8%
	5.1%	4.4%	8 %	5.5%	4.8%

1. Video Streaming Market is really hot
2. Digital Video Platform is the key to success
3. Big Data is “must-have” system for “Video-First Business” → Video Big Data

