ML & Al in Media & Advertising

Juan Carlos Ibáñez, PhD

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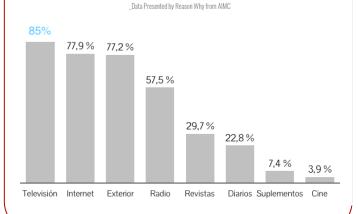
The Media and Advertising Business





User / audience

AUDIENCIA GENERAL DE MEDIOS PENETRACIÓN EN ESPAÑA



AVOD vs. SVOD

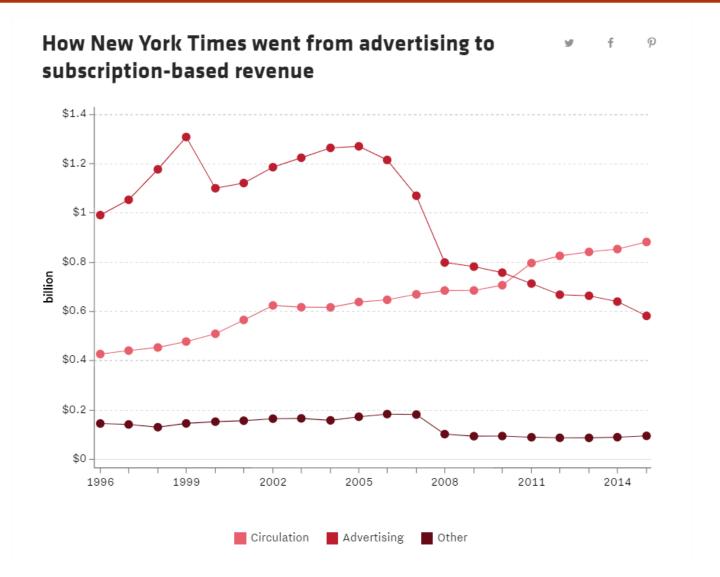


Ad-supported Video
On-Demand: a streaming video service that offers consumers access to a catalogue of on-demand content and contains advertisements.

Source: IAB Video Glossary



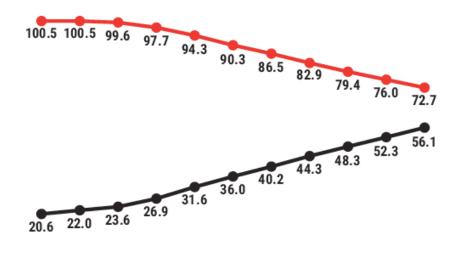
Subscription Video
On-Demand: a streaming service that consumers subscribe to for a fee and can access a catalogue of on-demand content.



https://www.nytimes.com/2020/05/06/business/media/new-york-times-earnings-subscriptions-coronavirus.html https://www.nytimes.com/projects/2020-report/index.html

Pay TV vs. Non-Pay-TV Households in the U.S., 2013-2023

millions



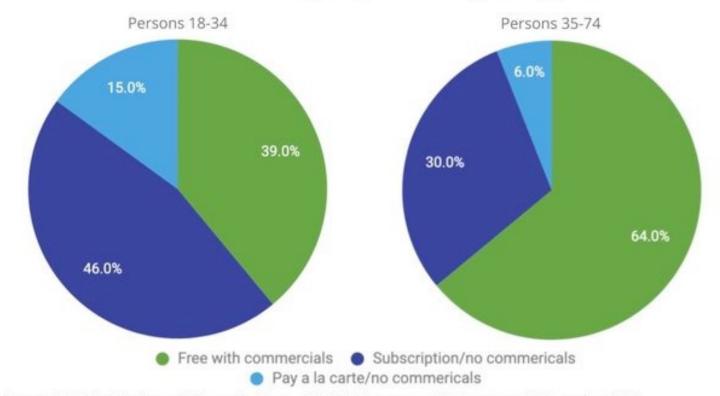
Pay TV householdsNon-pay-TV households

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

Note: Pay TV households are households with a subscription to traditional pay TV services; includes cable, satellite, telco/fiber operators and multiple system operators (MSOs); excludes IPTV and pure-play online video services (e.g., Hulu, Netflix, YouTube, etc.) Source: eMarketer, July 2019

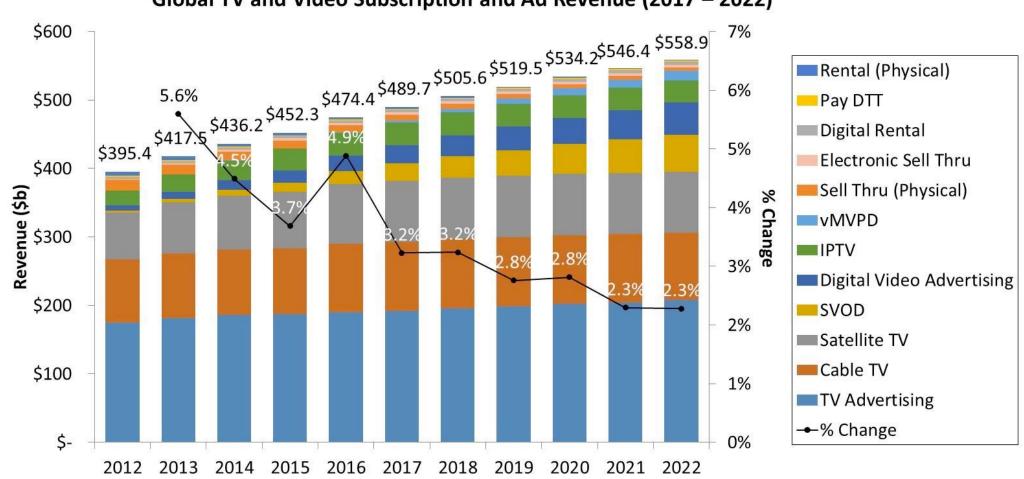
T10457 www.eMarketer.com

Which economic model do you prefer for getting your TV service



Source: HUB Entertainment Research. Base = 2,050 U.S. persons 13-74, surveyed December 2019.

Global TV and Video Subscription and Ad Revenue (2017 - 2022)



Traditional TV and Video = Cable TV, Satellite TV, IPTV, Pay DTT, TV Advertising, Sell-Thru (Physical), Rental (Physical)

OTT TV and Video = Digital Video Advertising, SVOD, vMVPD, Electronic Sell-Thru (EST), Digital Rental (TVOD)

Source: Strategy Analytics, TV, Video, and Advertising Forecasts, 2018

INVERSIÓN PUBLICITARIA

Televisón

Digital

Prensa



Radio

327 321

Exterior

Revistas

DIGITAL

HA CRECIDO UN 10% EN TOTAL INVERSIÓN MEDIOS EN 2017 Y UN 44% DESDE 2014

INVERSIÓN DIGITAL 2014: 1076 MM EUROS INVERSIÓN DIGITAL 2017: 1548 MM EUROS



FUENTE: Infoadex 2017

Juan Carlos Ibáñez 10

Cine

Dominicales



D PLAYERS. Qué clientes apuestan por el medio digital

DISTRIBUCIÓN,
AUTOMOCIÓN, TELCOS,
GRAN CONSUMO Y
FINANZAS, SON LOS
SECTORES A LOS QUE
PERTENECEN LAS MARCAS
QUE MÁS APUESTAN POR
DIGITAL.

ANUNCIANTE	▼ 2018 ▼	2017 🔻	% *
EL CORTE INGLES / HIPERCOR	4.864.419	5.831.774	-17%
RENAULT / DACIA	4.107.760	3.229.803	27%
MOVISTAR / TELEFONICA / TUENTI	3.227.012	2.301.135	40%
PROCTER & GAMBLE	2.652.070	2.311.596	15%
SEAT	2.595.003	2.012.848	29%
OPEL / GENERAL MOTORS	2.361.947	2.113.964	12%
VODAFONE	2.133.028	1.922.335	11%
BET 365	2.116.034	1.588.905	33%
FORD	2.067.339	2.281.332	-9%
B8VA	1.918.987	1.548.398	24%
APPLE	1.756.551	1.336.272	31%
UNIVERSAL PICTURES / UIP	1.720.423	2.705.167	-36%
REPSOL	1.707.726	1.429.408	19%
BANCO SANTANDER	1.685.005	1.284.899	31%
VOLKSWAGEN	1.623.322	1.943.178	-16%
NISSAN	1.612.091	2.075.511	-22%
ORANGE / JAZZTEL	1.463.661	1.046.918	40%
AUDI	1.457.956	1.026.502	42%
FIAT	1.413.731	1.483.593	-5%
CAIXA BANK / BANCA CIVICA	1.405.374	790.492	78%
L'OREAL	1.393.660	1.661.413	-16%
PEUGEOT	1.320.871	1.320.159	0%
SAMSUNG	1.317.851	1.036.528	27%
UNILEVER	1.316.455	975.068	35%
TOYOTA	1.286.241	1.112.025	16%

FUENTE: Market Monitoring Ene-jun2018

One subscriber or 48,000 pageviews: Why every journalist should know the "unit economics" of their content

"With the advertising people looking at the ad metrics, the subscription people looking at subscription metrics, and journalists looking at outdated metrics... nobody was looking at these metrics together to get a clear view of the business as a whole."

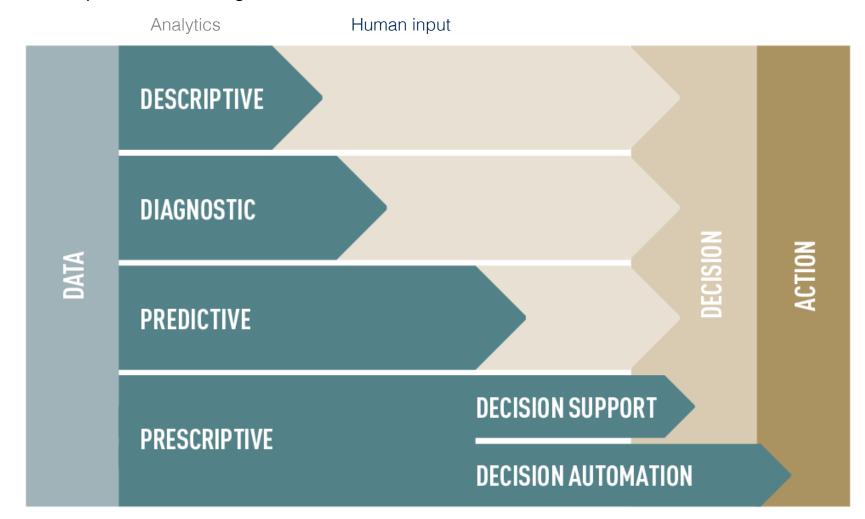
By **MATT SKIBINSKI** Oct. 7, 2019, 10 a.m.

The Analytics Environment

Data Science

Data Driven Business

Solve (Business) Problems using Mathematical Models and Data

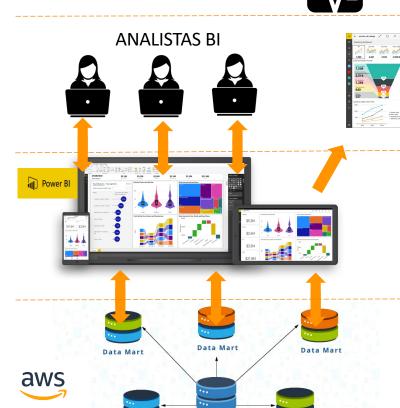


SELF-SERVICE ANALYTICS for DESCRIPTIVE AND DIAGNOSTIC ANALYTICS



1. Negocio:

• Cubrir las necesidades de negocio en tiempo y forma



CLOUD DATA LAKE

2. Equipos:

- Dominar la herramienta y los datos que usa
- Al menos 1 Power User (analista experto en BI) por equipo
- Formación continua y colaboración entre equipos

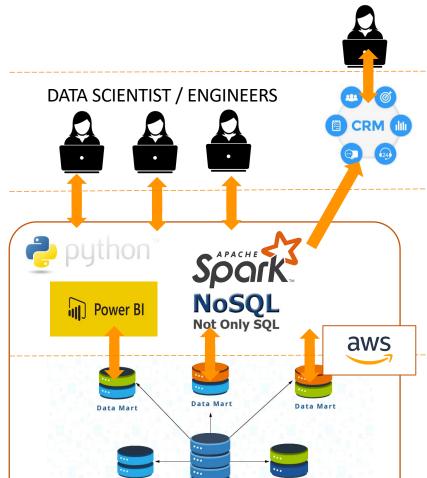
3. Herramienta de Visual Analytics

- Fácil e intuitiva para el usuario de Negocio
- Usos: (1) reporting, (2) ad-hoc/diagnóstico, (3) consumo por dirección (seguridad, mobile, calidad, ...)
- Una única herramienta standard para toda la plataforma

4. Modelo de Datos

- Completo: cubre las necesidades de negocio al 95% (5% es mas caro o complejo y se resuelve desde Big Data)
- Integrado: todas las fuentes necesarias
- Rendimiento alto: el trabajo del usuario de negocio es <u>interactivo</u> con la herramienta de BI. No puede esperar minutos para filtros o consultas

BIG DATA PLAFORM for PREDICTIVE & PRESCRIPTIVE ANALYTICS



CLOUD DATA LAKE

1. Negocio:

BUSINESS ANALYST

Cubrir las necesidades de negocio en tiempo y forma

2. MARKETING & CRM TECHNOLOGY:

• Inciporar los modelos predictivos en las herramientas operativas de marketing, Customer services, ...

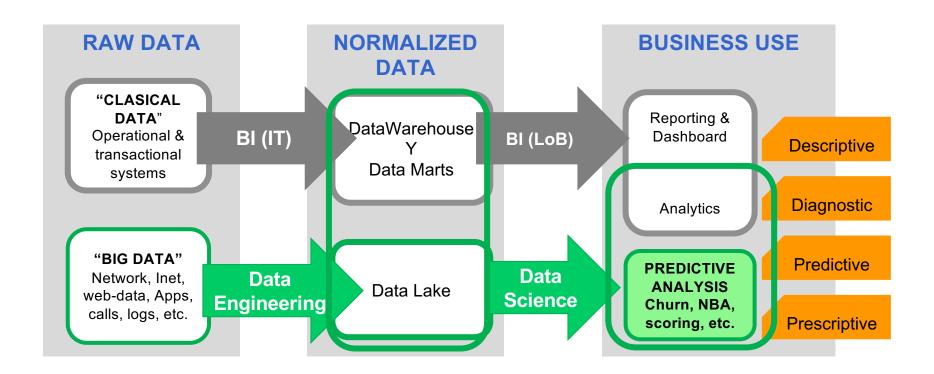
3. Herramienta de ADVANCED ANALYTICS

- Data Cloud
- Potente, flexible, fiable y escalable
- Una única herramienta standard, pero abiertos a estate-ofthe-art

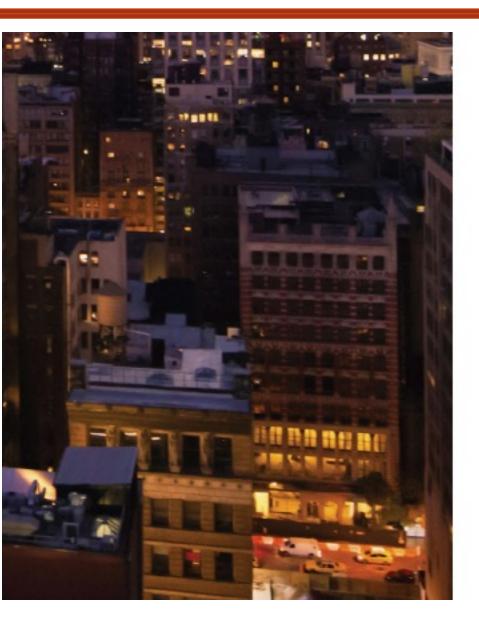
4. Modelo de Datos

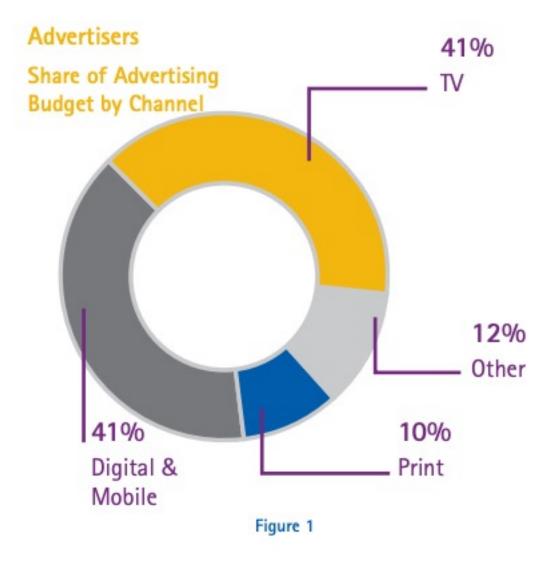
- Completo: cubre las necesidades de negocio al 95% (5% es mas caro o complejo y se resuelve desde Big Data)
- Integrado: todas las fuentes necesarias
- Rendimiento alto:
 - <u>interactivo</u> para visual analytics
 - Rápido para consultas masivas de Big Data

Traditional BI & Big Data



3 Digital Marketing







PLAYERS. Principales soportes (audiencia) AL POBLACIÓN INTERNAUTA: 31.921.000

Marzo 2018. Comscore

USUARIOS ÚNICOS (000)





25.011 78%





20.446 64%



29.508 92%



vocento

23.831 75%





19.351 61%









22.906 72%





59%





25.661 80%



grupoGodo

69%



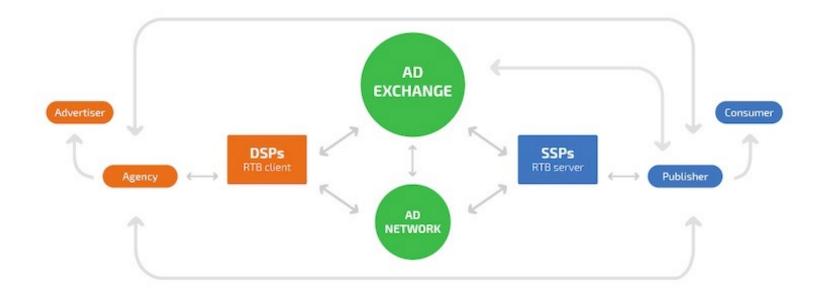


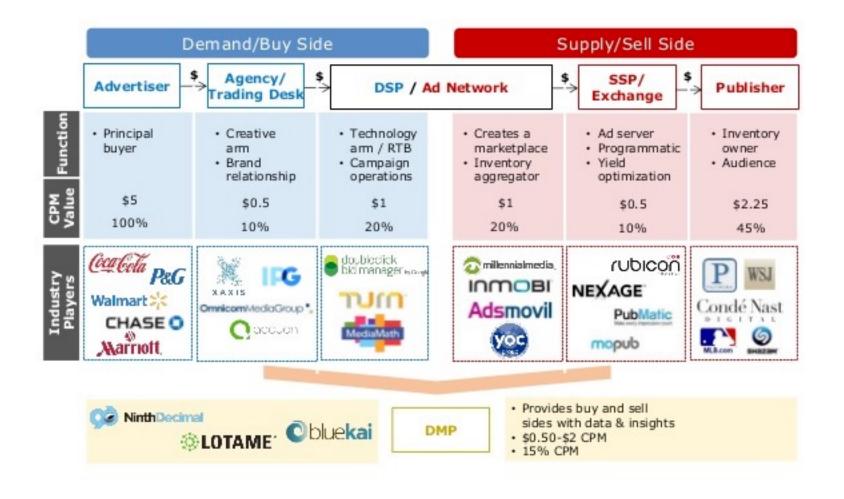


SI SUMAMOS LA AUDIENCIA DE ATRESTUBE, LLEGARÍAMOS A 22,2 MILLONES DE USUARIOS ÚNICOS. PASARÍAMOS AL PUESTO 8 DE COMSCORE CON CASI UN 70% DE REACH



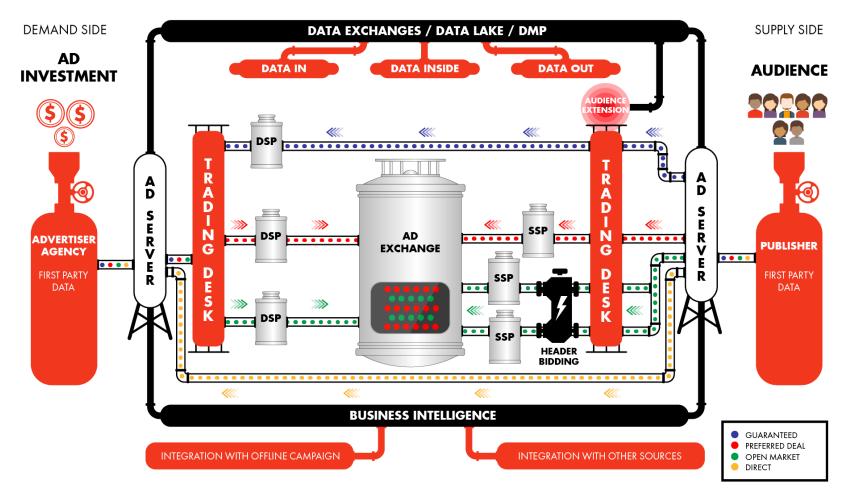
online advertising system







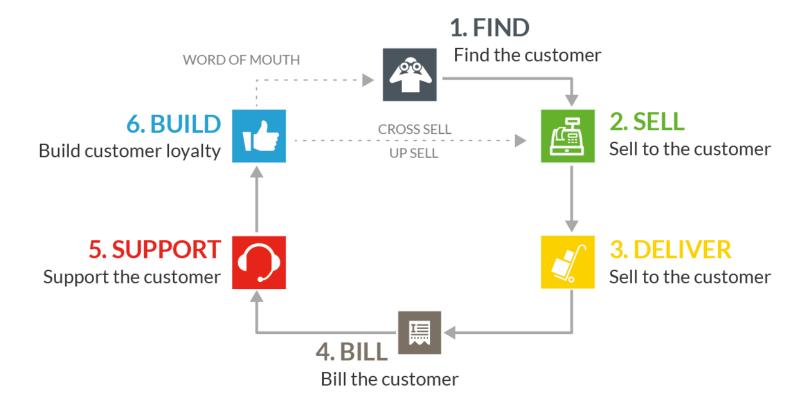
DIGITAL ADVERTISING ECOSYSTEM OVERVIEW



4 Customer Life Cycle

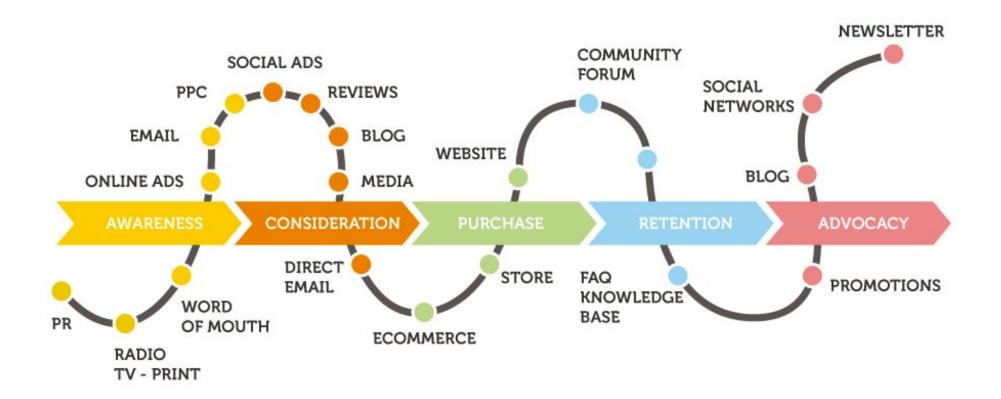
CUSTOMER LIFE CYCLE

Ciclo de vida del cliente

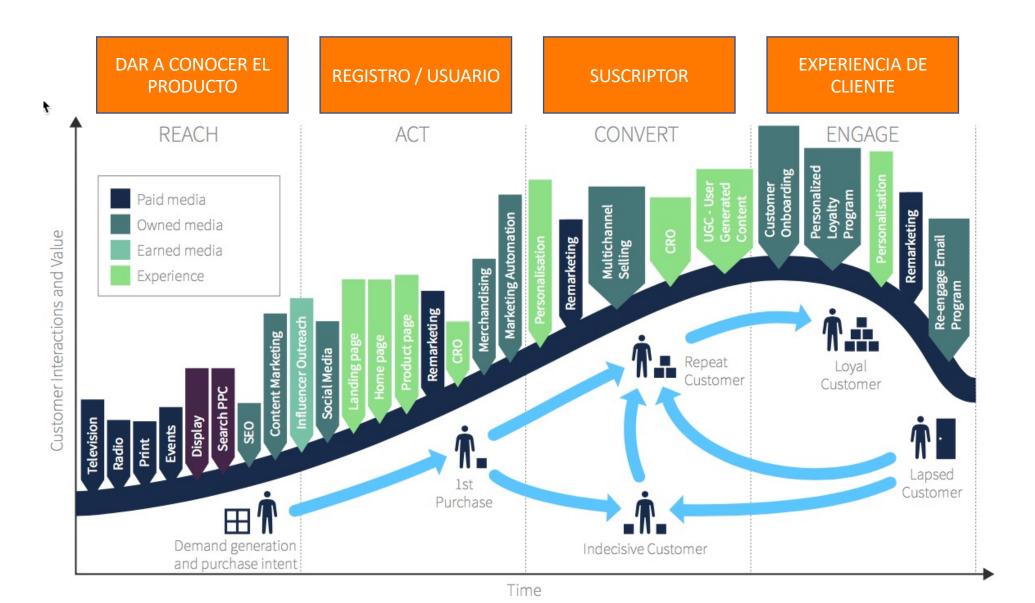


CUSTOMER LIFE CYCLE

Ciclo de vida del cliente



Marketing & Customer Value



CUSTOMER LIFE CYCLE

PLAN: Definir la Estrategia y Operativa para optimizar el Valor de la Cartera de cliente

- KPIs: valor económico de la cartera
- Alineada con la estrategia de la compañía

REACH: Crear/Maximizar la visibilidad-alcance del **PRODUCTO-SERVICIO ATRESPLAYER**.

- Dar a conocer el producto y crear interacciones de valor
- KPIs: conocimiento de marca
- Alineado con la estrategia (medio plazo) y táctica (corto plazo) de la compañía

ACT (INTERACT): Generar usuarios **REGISTRADOS** (antes que suscriptores)

- Etapa separada de la conversión, ya conseguir conversiones en otros sitios web y en redes sociales es muy difícil
- KPIs: usuarios registrados, minutos consumidos, actividad, etc.

CONVERT: Conversión a **SUSCRIPTOR**.

- Hacer que la audiencia dé el siguiente paso (suscribir)
- KPIs: conversión a suscriptor, Customer journey de suscripción

ENGAGE: Mejorar la **EXPERIENCIA** de cliente. Lograr **FIDELIDAD** del cliente.

- Generar lealtad mediante interacciones: comunicaciones, promociones, recomendaciones, etc.
- KPIs: Tenure, compra repetidas satisfacción, (NPS),
- Crítico, medir la actividad, clientes activos, minutos vistos,

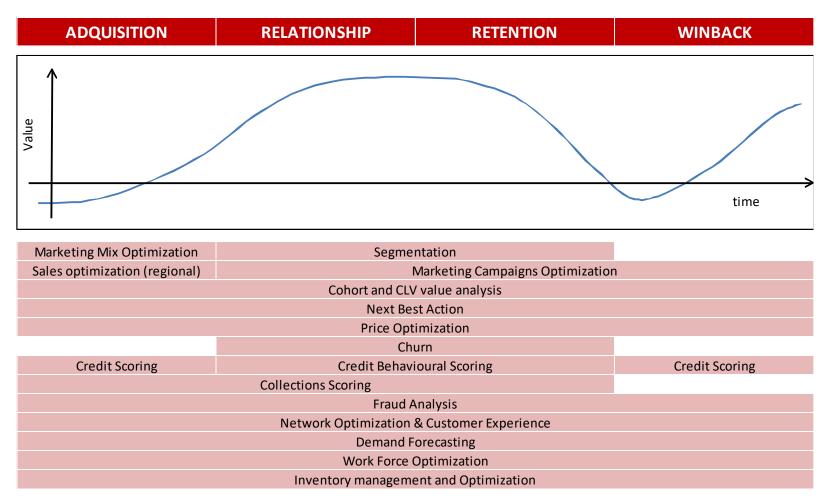
CUSTOMER LIFE CYCLE

Actividad analítica a lo largo de la vida del cliente

CUSTOMER LIFECYCLE & ANALYTICS **TASKS** Marketing & **Customer Value** Finance, Credit & Billing Network **Operations &**

Call Center

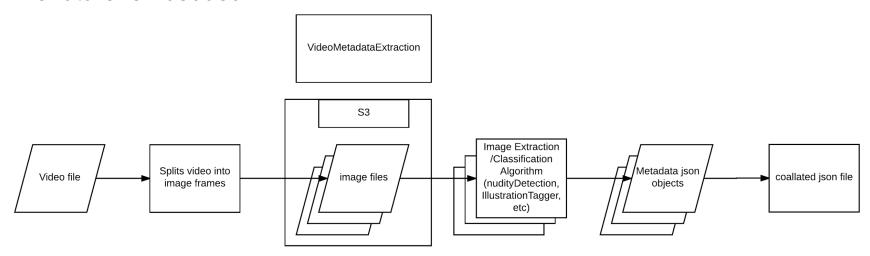
Logistics



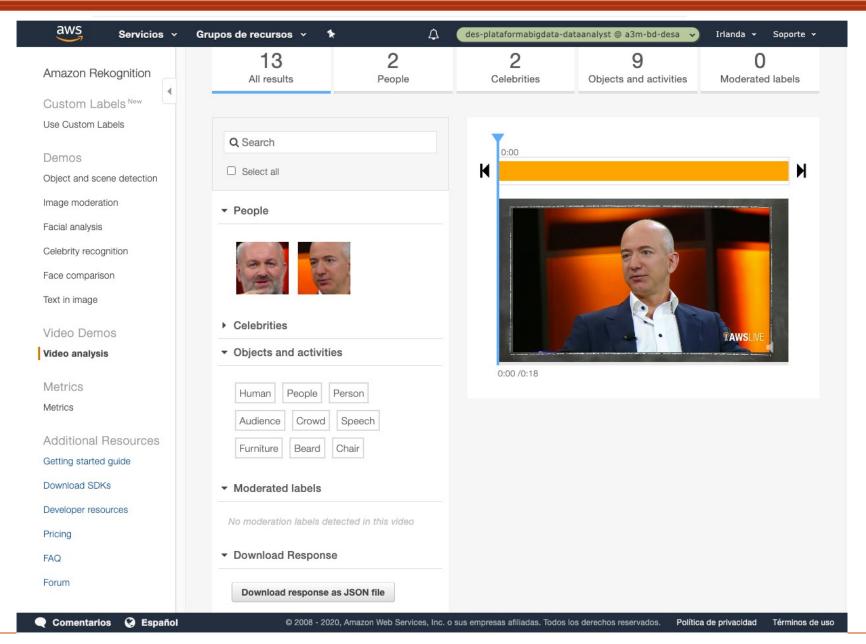
5 Al applications in Media & Ad Industry

Web examples:

- A. AWS: Amazon Rekognition Video
- B. Vilnyx: Content metadata extraction
- C. Expert.ai: Content metadata extraction
- D. Thehive.ai: Al applications to Media
- E. The future: embedded Al

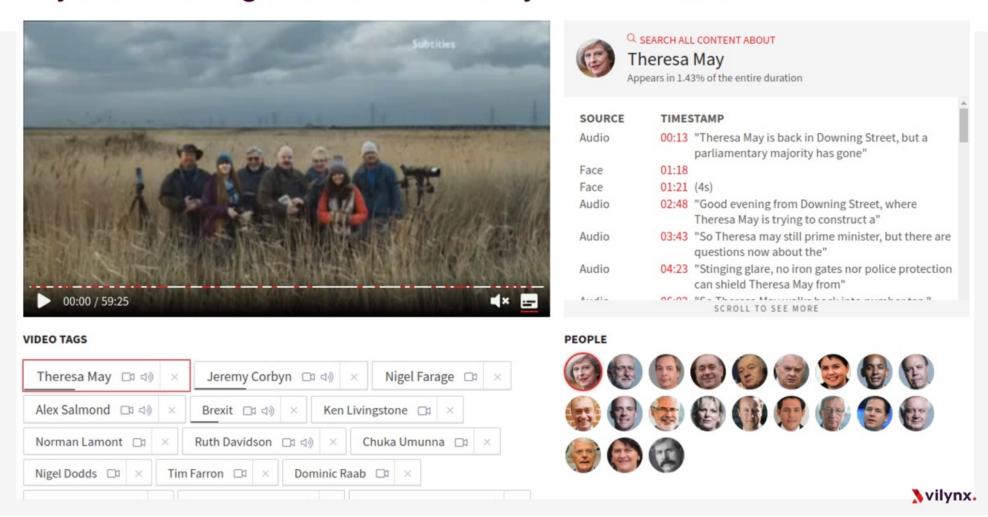


Al





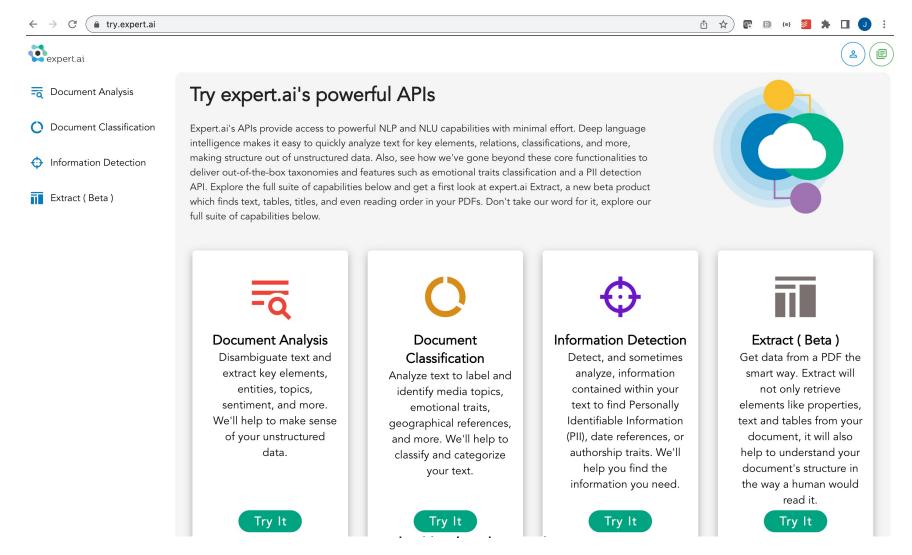
Vilynx. Attaching Rich Metadata to your contents.



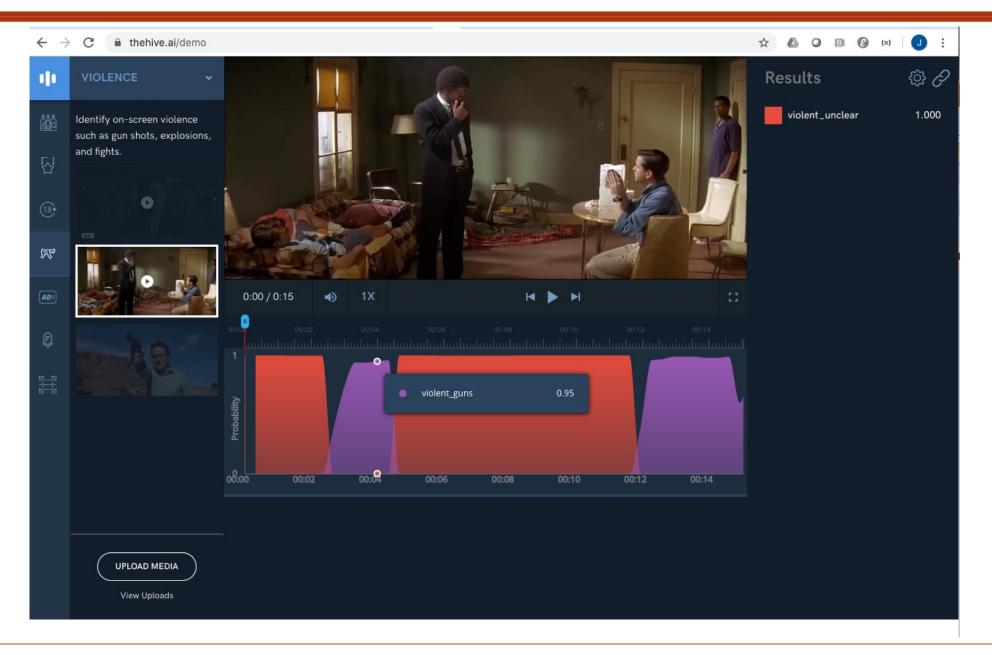
https://blog.vilynx.com/vilynx-explore-a-new-way-to-explore-your-content-35c9b038da2e



Expert.ai: Content metadata extraction



Al



Embedded Al

- Automatic bidding for digital ads
 - Addressable TV , HBBTV, LovesTV (Spain)
- Al for experimental design
 - Face recognition to identify likes
- Media planning
 - Full attribution data / crossdevice. Identify likes by facial recognition
 - Better planning: media mix budget
- Automatic Content
 - Recognition / extraction
 - Creation: Al is now creating content
- Extreme advertising personalization:
 - Better personalization
 - Al will create actual ads, personalised to you