

# DATA-DRIVEN COMPANY DIGITAL VIDEO ANALYTICS

### **GREEK TELECOM MARKET CONTEXT**

Mobile

#### Non-Exhaustive

- Over the last years, Greek players have began to move sideways in an attempt to offer bundled services to customers
- Network sharing is in place between
   Vodafone and Wind in order to reduce costs
- Industry ripe for consolidation
- Greek Telcos recognize the necessity to move to Fiber-to-the-Home through utilizing respective Next Generation Access network technologies

(MVNO)

Forthnet

Forthnet

Nodafone

**Broadband** 

**Fixed** 

**Voice** 

Source: Accenture analysis

**Pay TV** 

# DIGITAL VIDEO INDUSTRY IS CATEGORIZED BY FOUR DIFFERENT BUSINESS TYPE

Each business types follows a completely different revenue model

#### **BUSINESS TYPES**

#### **PRIMARY FOCUS**



# IN THIS MARKET CONTEXT WHAT DATA DRIVEN CAPABILITIES ARE REQUIRED?

DIGITAL VIDEO CAPABILITIES Non-Exhaustive			FTA	ОТТ	PAY TV	OPERATORS	
Customer		Viewership analytics		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
		Rete	ention analytics		$\checkmark$	$\checkmark$	$\checkmark$
		Customer	experience analytics		$\checkmark$	$\checkmark$	$\checkmark$
Advertising		Ad in	ventory analytics			$\checkmark$	$\checkmark$
		Targ	eted advertising	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Content	-	Content	pricing and bundling		$\checkmark$	$\checkmark$	$\checkmark$
		Channel per	formance optimization	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
		Content	recommendations		$\checkmark$	$\checkmark$	$\checkmark$

## **DATA-DRIVEN VIEWERSHIP ANALYTICS**

# A leading North American telecommunications company realized tangible benefits by analyzing customer viewership & usage data



One of world's leading telecommunications company was expanding to offer video services on a total digital network

However there was no comprehensive view of video usage at the customer level and programming & content decisions made by gut feel

Not leveraging consumer usage data to drive growth opportunities led to low success rate to upselling more expensive bundles to customer and limited ability to project impact of dropping or adding channels to bundles



Set up a full viewership analytics environment in the cloud and used analytics to understand customer behavior, create channel bundles, and define customer segments

Implemented new reporting interface to track viewership behavior and created cross sell predictive models to select splash screens and increase revenue

Created "what if" forecasting models for the impact of moving channels within programming tier



Increased revenue due to improved take rates (60-90% vs control)

Reduced cost for optimizing content (for example there was \$7-8M annual benefit by removing just one low viewership channel from lower level bundles)

Identified households with the potential of upselling to premium channels

### **DATA-DRIVEN CUSTOMER EXPERIENCE**

A leading EU telecommunications company analyzed customer experience for broadband to identify causes of dissatisfaction



Client wanted to support its business by developing a model to predict the customer dissatisfaction on Home Internet Access

Based on customer experience survey responses and network data, client was seeking to measure and to understand the network experience of every customer and the key KPI's that drive customer dissatisfaction as an early churn prediction



Developed different powerful predictive and machine learning algorithms to support decision making on customer dissatisfaction

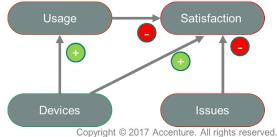
A dissatisfaction score was generated for each customer utilizing the proposed model identified key drivers of customer dissatisfaction

A structural equation model was developed on parallel to identify the cause factors of customer dissatisfaction based on survey responses



Measured direct and indirect drivers of dissatisfaction.

Example: network inconsistencies and equipment failures have a negative direct effect to satisfaction while the number of connected devices have a positive direct effect to usage. However high usage appears to influence negatively the client satisfaction limiting the positive impact of number of devices



### DATA-DRIVEN CONTENT RECOMMENDATIONS

A leading US online video streaming company improved its content recommendations through machine learning algorithms



Client was a leader in online video streaming in the US with thousands of titles offered either in SD or in HD format

Content recommendations for each title were created by humans based on expert judgement

Client required to demonstrate business case for implementing a fully automated recommendation system



A personalized recommendation solution was developed combining past viewership data with an item-based collaborative filtering algorithm

Solution included campaign execution through a direct marketing digital channel

AB test included two groups of customers, with algorithmic recommendations competing with manually configured recommendations head to head



Algorithmic recommendations drove 3x to 4x as many video streams

Customers receiving algorithmic recommendations had 1/3 churn the rate of customers receiving manually configured recommendations