Cable TV transformation: why innovation in user experience matters

Simon Trudelle, Senior Director Product Marketing
More than 500 million users enjoy Kudelski Group solutions every day
KUDELSKI GROUP

DIGITAL TELEVISION

SECURE COMPELLING EFFICIENT TV SOLUTIONS

$90B Content Value
555 Operators
300 Million Devices

CYBER SECURITY

END-TO-END ECOSYSTEM SECURITY

Finance
Defence, Government practices

PUBLIC ACCESS

PARKING (#1), MOUNTAINS (#1), ARENAS, ATTRACTIONS

>10,000 locations
>90 countries
Connecting People to the Content They Love

Protected Revenues: $90 Billion
Devices: 300 Million
People: 500 Million
Service Providers: 555

$200 Million annual R&D investment
Do we still need to innovate TV?

What more could we possibly do?
Consumers have **NEVER** been so spoiled by TV...
Consumers have NEVER been so spoiled by TV…

TV Anytime, Anyplace, Anywhere to watch What We Want, When We Want, Where We Want. Live TV, Pause and Rewind Live. Start Over, Catch-Up. Store Live TV on a Hard Drive (Personal Video Recorder) or a Removable Storage. Whole Home PVR or Network PVR - Series Recording for Binge Watching. Side Load content Companion Devices to consume later when in the garden, or perhaps travelling on a bus or train. Companion Screen TV Everywhere with Throw and Fetch & Follow Me TV, Over The Top so we can have non-Linear content and not be restricted to a Schedule. Interactive TV & Applications Weather, or Horoscope or Games delivered over the Cloud and Home Network. Search & Recommendations & Social Media. STB or CPE or iDTV or Smart or Connected TV, in 3D or 4K Ultra HD or perhaps Super Ultra HD 8K. Add in High Dynamic Range, so that we get the best quality on a Curved OLED, millimetre thick screen - 24 Hours a Day, 7 Days a Week, 365 Days of the Year completely uninterrupted.

We have given them a lot of choice … but BEWARE …
BATTLE for the Consumer’s Heart is RAGING ON…

Everyone along the value chain has to be obsessed with the end consumer
SEDUCTION is the game
INNOVATION has never been more critical
• Innovation characteristics of the industry?
• Winning strategies of industry leaders?
• Emerging opportunities – and challenges?
Pay-TV Innovation Forum | March-September 2017

London, Singapore, Las Vegas and Amsterdam.

dtv.nagra.com/paytvif
2017 Programme Overview

- **Scope**
  - 233 service providers
  - 42 countries across four regions: EMEA, North America, Latin America and Asia Pacific
  - 93% of the pay-TV market (outside China)

- **Five key stages**
  - Original research and analysis auditing pay-TV operator product portfolios
  - Seminars with pay-TV and content executives
  - In-depth interviews with senior executives
  - Online survey of pay-TV industry participants
  - Global report summarizing key learnings and trends
More than 200 pay-TV executives contributed to the Forum

Europe, the Middle East and Africa

Asia Pacific

North America

Latin America
The Forum explored the development of pay-TV provider portfolios over the last year – on TV platforms, OTT and in adjacencies.

### CORE PAY-TV OFFER: TV PLATFORM AND ONLINE TV SERVICES

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### ADJACENCIES

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The pay-TV landscape today
The global pay-TV industry is experiencing a period of change and disruption

82% of executives agree that “competition in the pay-TV industry is set to increase dramatically, as pay-TV companies, telcos and OTT service providers compete for subscribers.”

71% of executives agree that “pay-TV service providers in their country will struggle to grow their businesses over the next five years”, up from 57% in 2016.

Question: Thinking about developments affecting pay-TV industry revenues in your country through to 2022, how much do you agree or disagree with the following statements? (% of respondents indicating “strongly agree” or “agree”; n = 125)
Although there are many trends impacting the pay-TV industry, executives highlight three major challenges:

1. The proliferation of OTT services
2. Changing consumer behaviour and demand
3. Content piracy, fuelled by illicit streaming devices
The most advanced portfolios tend to be offered by major pay-TV operators and telcos

The state of pay-TV innovation today

Portfolio score (2017)

Most advanced portfolios

Rising stars

Pay-TV service providers

Notes: Pay-TV portfolio rankings by innovation score (n = 233)
The propensity to innovate varies significantly – top innovators in 2016 were more likely to improve their portfolios over the last year.

% of operators improving their offering in the last year

- **Innovators (top 33%)**: 80%
- **Middle ground (middle 33%)**: 67%
- **Laggards (bottom 33%)**: 37%

Notes: Proportion of providers improving their offerings – i.e. introducing new products, features or functionalities – during the 2016/17 period (n = 220, change YoY, on a like-for-like basis)
Operators in North America and EMEA – the leaders in deploying advanced portfolios – are also the fastest to introduce new features

% of operators improving their offering in the last year

- **North America**: 81%
- **EMEA**: 72%
- **Asia Pacific**: 50%
- **Latin America**: 45%

Source: MTM analysis of pay-TV service provider portfolios in Asia Pacific, EMEA, Latin America, and North America (n = 220, 42 countries, like-for-like)
Looking ahead – future areas of opportunity
The most commercially attractive opportunities relate to strengthening and differentiating core pay-TV and online TV offers.

Looking ahead – future areas of opportunity

**CORE PAY-TV OFFER: TV PLATFORM AND ONLINE TV SERVICES**

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**Survey results**

**Question:** Thinking about new products and services, what do you see as the most commercially attractive opportunities for pay-TV service providers in your country? (% of respondents indicating 4 = attractive and 5 = highly attractive, n = 125)

**Key:** Commercial attractiveness

- **Low**
- **High**
Pay-TV executives see innovation opportunities in both the product offering and commercial model

Looking ahead – future areas of opportunity

### Product innovation
- Connected, interactive, and seamless pay-TV experiences across multiple devices

### Commercial innovation
- More segmented view of customers, more flexibility, and innovative partnerships with content providers

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**Survey results**

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Addressing the innovation imperative: NAGRA Solutions
Do we still need to innovate TV?

What more could we possibly do?
Don’t bring a knife to a gunfight
Appeal of “Large Platforms” and “Digital Insurgents”

- Scale & Presence
- Young & Fresh Style
- Service Innovation Velocity
- Consumer Centricity
- (frightening) Consumer Intimacy
Picking the right weapons – and using them smartly

Frictionless BYOD

Smart IP-Fication & Cloud-i-Fication

Rapid Data Driven Innovation

Broadly Embrace Consumer Devices (but not naively)

Cloud Economics & TV-Grade Reliability

Beyond Opinion & Guesswork Actionable Data Intelligence
Smart IP-fication – unified IP for the “post-OTT era”…

Single Service Creation & Management
Cloud Economics
Cross-device Service Evolution

Single Network Paradigm
(Unicast ABR, Multicast IPTV, Multicast ABR, DVB)

Single Coherent Experience
Same “product”
A Compelling User Experience on All Screens

The OpenTV Experience

- Simple and intuitive discovery & consumption of content
- Consistent experience across all viewing use cases & devices
- Smart & efficient operations
- Rapid & insightful service innovation

OpenTV UI

OpenTV Suite

OpenTV OS  OpenTV Player  OpenTV Platform

OpenTV Signature Edition
Complete and pre-integrated pay-TV entertainment solution

4K + TV Everywhere with multi-device capability
Free flowing personal route to content

Linearized SVOD
Thematic Channels

TRADITIONAL

MODERN

Redefined Discovery
Mood and Theme
Feature rich - Modular services - Always evolved

Pause Live, Start-Over – Premium

Secure TV Anywhere

Follow Me

Analytics

NAGRA Security, Watermarking & DRM

Replay TV

Apps, Services

AVOD, SVOD, TVOD - MONETIZATION

Personalisation

We automatically enhance the system – bringing scheduled add-on features and services - so you can concentrate on marketing to consumers and business growth.
Content Management System - Monetization

Open TV Signature Edition

Operations Console

Personalisation and Consumer Satisfaction Focus

Onboard
Update
Manage
Analyse
Promote
Advertise
...
Content Management System – Analytics

Analyse
Act
Promote
Grow NPS

Powerful AI-driven data analytics platform
Smart & Data Driven Innovation

Service, Device & App Security

Anti-Piracy Services

OpenTV UI

OpenTV

Platform

OpenTV Player

OpenTV OS

NAGRA

Security Services Platform

Forensic Marking

Content Value Protection

Compelling User Experience

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