

Cable Congress 2018



FAANGS for the memories

28 March 2018

Cable Congress Event Summary

Hardly a presentation went by at the annual meeting of the European Cable Industry without mention of the FAANGS (Facebook, Amazon, Apple, Netflix, Google).

These internet titans were cited as the reason behind cable's need to consolidate further, to embrace mobile more energetically, to shift video transmission to IP, to invest in ever higher speed and capacity, to embed data, machine learning and artificial intelligence in business models and to become an aggregation hub for internet delivered video content. There were also numerous calls for the FAANGS to be blunted by more active oversight and regulation.

If the time to mend the roof is when it is sunny, then cable is picking the right time to examine its strategy and positioning. European cable growth remains positive, video erosion is slowing and is very minor compared to the high-ARPU US market. The reduced cost to extend network means that the pace of new cable build is growing, and cable businesses are attracting high valuations in the accelerating M&A market.

The pace of innovation remains high, and the Congress showcased this, with developments in the traditional cable technologies as well as a recognition that the future would lie in a world of IP video and data-led artificial intelligence processes.

Marketing and products are not immune from evolution either – the days when bundling and triple play were the holy grail are over, and there is a recognition that personalisation, ease of use and content aggregation are needed to retain customers whose behaviour and desires are adapting to a digital world.

A collection of findings from Cable Europe's annual Congress, March 6-7 2018 in Dublin

The report is ordered thematically rather than by session, in an attempt to illustrate general Congress themes rather than act as a transcript of the event. Not all sessions were attended. The quotes attributed in this report are not always verbatim, but are intended to reflect the intention of the speaker.

Cable Congress 2018: growing revenue and products

What the hosts said

The European cable industry continues to grow steadily at 2.4% in very competitive markets. Adapting to constant change and disruption, cable keeps delivering high-end broadband and digital tv services for its customers, thanks to years of investment in innovation and infrastructure. *Manuel Kohnstamm, President Cable Europe*

European cable operators have responded to the opportunity presented by broadband growth by delivering high-speed connectivity, online entertainment, original on demand content and next-generation TV platforms. New Digital TV services and the fastest broadband speeds have helped cable to stay ahead and provide a strong platform for the future. *Matthias Kurth, Executive Chairman Cable Europe*

Cable strategy: prepare for change

Key themes

- The industry must be ready to be disrupted
- Video is being subsumed into data
- Cable lags behind on customer satisfaction – it must improve
- Cable has to work digitally and be data-led; this requires fundamental changes
- Learn from the SVOD giants, integrate their products and adapt yours

What was said

The future of cable is not a technology problem, it is a business model question. *Boris Maurer, Digital Transportation Lead, Accenture*

In the phone world it started with one service, voice, then we added on text, then data, but now it is back to just one. Data subsumed the others. The same is happening in fixed video – we added voice and data to video, but now data is subsuming it all. *John Vonk, VP Pricing and planning, Comcast*

Disruption is not driven by market leaders. WhatsApp single-handedly destroyed an industry worth \$160 billion. The day before the iPhone launched, Nokia had 63% of the mobile market and offered 228 different models. *Doron Hacmon, Chief Product Officer, Liberty Global*

The telco industry in Europe has already been disrupted – EBIT in 2016 was half the level of 2006, a reduction of €25 billion. *Boris Maurer, Digital Transportation Lead, Accenture*



Manuel Kohnstamm,
Liberty Global



Matthias Kurth, Cable
Europe



Boris Maurer, Accenture

Every SVOD service has a higher NPS (Net Promoter Score) than every cable operator in every market. Why? Cable is a much more complex service proposition. *Guy Bisson, Research Director, Ampere Analysis*

GAFA are all software-first companies. We [cable] are not. They all broke out of the orthodoxies of their industries. Their products are experiential. Their footprint is the globe, but we limit ourselves to where there is cable in the ground. *Doron Hacmon, Chief Product Officer, Liberty Global*

At the core of future success for cable is the move from being a provider of a service to an interface platform allowing customers to connect to external services. *Boris Maurer, Digital Transportation Lead, Accenture*

As in the telecom industry, the future of cable will eventually be virtual. *Paul Hughes, Director of Strategy, Netcracker (in BroadbandMagazine)*

TV content is in a golden age, and delivery is good – it is the overall experience that needs improvement. There is plenty of connectivity, we have a customer experience challenge. *Jeff Binder, EVP and President, Layer3 at T-Mobile US*

In the future, we need to fully embrace a digital way of working, and we must be serious about bringing more women into senior positions. *Tom Mockridge, CEO Virgin Media*

Cable operators know that broadband is a strength, bundling is good, competition is strong, user experience is important and OTT video is hot. They don't really know what is driving broadband demand, how customers perceive value, where else and how they get OTT video and how to partner effectively. *Brett Sappington, Senior Director of Research, Parks Associates*

Our Q3 17 survey of US pay TV showed only two services with positive Net Promoter Scores – PlayStation Vue and Sling. Why? 63% cited high cost relative to perceived value, and 27% poor customer service. *Brett Sappington, Senior Director of Research, Parks Associates*

The industry likes to talk about innovation in B2B, but the reality is that the big push is selling high margin connectivity. Complex, cloud-based solutions can make the customer sticky, but they often have low margins. *Matthias Hamel, MD Solon Management Consulting*



Doron Hacmon, Liberty Global

Doron Hacmon's 5 ways cable needs to transform

From cable to software centric

From many to one
(LG has 8 TV platforms and 23 STBs)

Accelerate
(we used to do 2 releases a year, Spotify does one every 10 days)

Macro to micro marketing

From self to customer service

IHS Markit recommendations for the industry

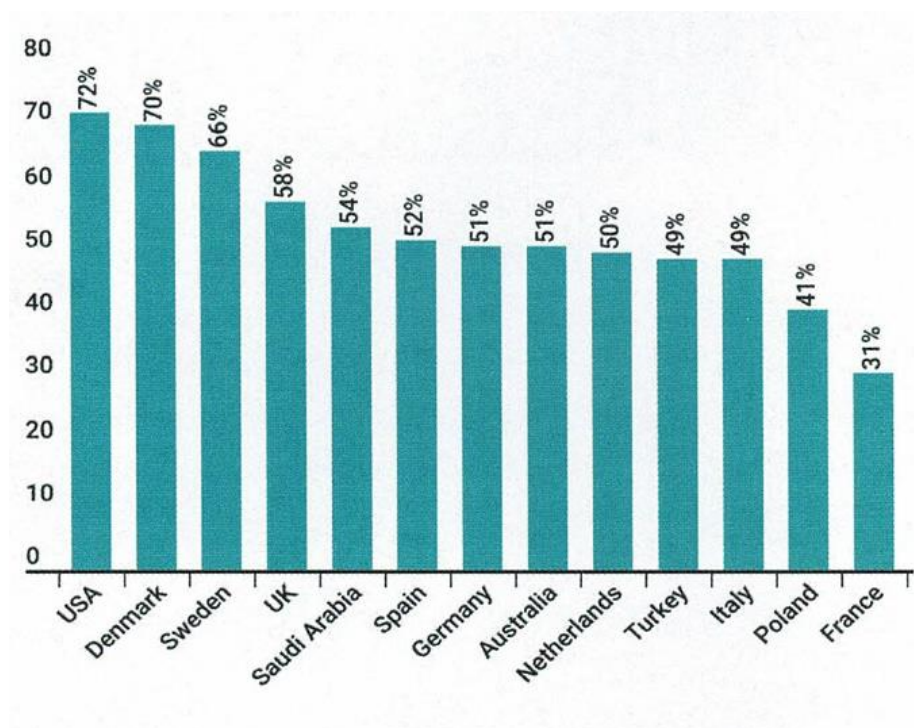
- Aggregate the aggregators of online content
- Consider selective investments in exclusive series to differentiate
- Build on trusted gatekeeper status with smart home and digital assistants by accommodating third party devices
- Don't overestimate the speed with which new tech (5G, blockchain) will impact you

Ted Hall, Director of Research, IHS



Ted Hall, IHS Markit

Figure 1: Proportion of Internet Users with at least one SVOD subscription



Based on 26,000 respondents in 13 markets, including the USA. Q3 2017

Source: Ampere Consumer

Content market developments: endless bubble

Key themes

- Content may be a bubble, but no-one can see it bursting
- Sport is an important category, but not the only content that matters

- Free to air has a role to play, especially when combined with SVOD

What was said

Content is a bubble, but a bubble that will keep growing. Everyone needs content, especially high-end drama. *Jeremy Fox, CEO Atrium TV*

In Germany we used to have “free” high quality linear TV, and Sky/Premiere at the premium end. Germany is now starting to develop a low-ARPU premium content market for niche and targeted content. *Rolf Wierig, VP Entertainment Products, Vodafone*

Sport is the gateway drug for pay-TV. Crystal Palace is pay-TV’s Crystal Meth. *Michiel Bakker, CEO GINX Esports TV*

Of a global population of 7 billion, there are 4 billion soccer fans, 2.5 billion cricket fans, 2 billion field hockey fans and 1 billion basketball fans. 37 of the 50 top-watched US shows were sporting events. *Levente Malnay, SVP AMC Networks*

30% of the population love sport to the exclusion of everything else. Everyone else has much broader interests. *Guy Bisson, Research Director, Ampere Analysis*

Be careful of survey data – according to surveys everyone reads Shakespeare, and no-one watches porn. *Levente Malnay, SVP AMC Networks*

The Nordics are a very advanced SVOD region: there is a lot of hype in the UK, but it is still 85% linear. *James Currell, President UK, N & E Europe Viacom International*

Channel 5 has been a big step forward, and it has also lifted the pay channels through content sharing, better scale with partners and cross promotion. *James Currell, President, UK, N & E Europe Viacom International Media Networks*

Ten years ago, Viacom International would have been mostly US content, but we now try to create local content everywhere. We have a \$1 billion spend ex-US. *James Currell, President, UK, N & E Europe Viacom International Media Networks*

Cable content: some exclusive, but don’t bet the ranch

Key themes

- Cable must balance content aggregation with differentiation
- Investments in exclusive content can work for marketing
- Co-operation with local broadcasters can play to cable strengths



Surfing the content tsunami: the evolving dynamics of operators and channels



James Currell, Viacom International, in conversation with James Wright, CNBC

What was said

We are primarily in the connectivity game, providing access to every relevant piece of content. Smart aggregation. Exclusive content could help marketing, but it is not vital.

Rolf Wierig, VP Entertainment Products, Vodafone

There is an explosion of content, usage and devices. As a retailer, we have to choose some elements that are exclusive to boost our sales efforts. Exclusive content is a marketing strategy, not a content strategy. *Tom Mockridge, CEO Virgin Media*

You don't need a lot of exclusive content, just enough to differentiate yourself. We don't want to unwisely compress our margins, but we'll make selective bets. *Bruce Mann, Chief Programming Officer, Liberty Global*

Cable operators can perhaps collaborate with local broadcasters to create personalised content. *Kim Smets, Director market and Customer Insights, Telenet*

Our FTA broadcaster is increasingly profitable. *Tony Hanway, CEO Virgin Media Ireland*

Operators are going two ways on content, some investing, some sticking to more neutral strategies. *Mats Arnbjørn Rasmussen, CTO Cloud and Video, Huawei*

For our [Atrium's] partners, it's a marketing play – spend a million or two on two exclusive productions a year. *Jeremy Fox, CEO Atrium TV*

When we took some premium sport off our platform we suffered some customer loss, but overall we are doing better. *Paul Farrell, VP Commercial, Virgin Media*



Tom Mockridge, Virgin Media, interviewed by Kate Bulkley



Manuel Cubero, Vodafone Germany, Tony Hanway, Virgin Media Ireland, Timm Degenhardt, Tele Columbus, Robert Redeleanu, UPC Romania and UPC Hungary and Kate Bulkley

FAANGs – content has to be integrated, but how?

Key themes

- With huge content spend and global reach, FAANG content can't be ignored
- There are a range of options to integrate the content into cable
- Ease of use and stickiness argue for full integration, but bill shock is a factor
- Usage data will be a major factor in negotiation over time

What was said

The internet players collectively invested over \$18 billion in video content last year. But Pay-TV is fighting back – Liberty and Sky have invested in 16 production companies between them, DT, Orange and Telefonica all commissioned original content too. Atrium TV is a “commissioning club” of regional operators to gain scale in content commissioning. *Ben Keen, Independent Analyst*

Who knows what Apple may do – with 20% of smartphones and 25% of tablets, if they put \$1 billion into content, it's like buying lunch for them. *Bruce Mann, Chief Programming Officer, Liberty Global*

The new race for aggregation is on. The Pay TV industry is where it is today through aggregating content. It can do the same with OTT if it engages early enough. *Brett Sappington, Senior Director of Research, Parks Associates*

How can operators partner with OTT? Simple promotion, simple resale, bundling with broadband, integration in the STB or zero rating (especially over mobile). *Brett Sappington, Senior Director of Research, Parks Associates*

OTT players are my best friends – they are today's premium channels. I can include them in our entire UI ecosystem. *Pedro Bandeira, Head of Product Development, NOS*

I'm not sure that just integrating Netflix in the EPG is the best way to go – deeper integration of the content is better. *Timm Degenhardt, CEO Tele Columbus*

We'd like to bring in as much video content onto our platform as possible, but it takes time to negotiate this. *Manuel Cubero, Chief Commercial Officer, Vodafone Germany*

We have three tests for adding SVOD content: is the brand meaningful, is the content good and is the business model consistent with our own? *Bruce Mann, Chief Programming Officer, Liberty Global*



Harold Grönenthal, AMC Networks International, Bruce Mann, Liberty Global, Jeremy Fox, DRG, Carter Pilcher, Shorts International and Rolf Wierig, Vodafone Germany



Brett Sappington, Parks Associates



Manuel Cubero, Vodafone Germany

Integration of Netflix and others in the billing can cause a problem if you get blamed for the higher bill. *Tony Hanway, CEO Virgin Media Ireland*

There are lots of fears about how big the threat GAFA [Google, Apple, Facebook and Amazon] has become and how regulation doesn't seem to apply to them. But they don't have the rich data about how customers behave which we do. *Laurence Miall-d'Aout, VP, data and advanced advertising, Liberty Global*

Ireland is one of the youngest countries in Europe, and with very early tech adopters. Netflix is the third most watched channel in our system, after TV3 and the state channel. We've seen no cannibalisation though. *Tony Hanway, CEO Virgin Media Ireland*

In our region, penetration of SVOD is not that high, and adding €8-10 for Netflix increases the bill substantially. *Robert Redeleanu, CEO UPC Romania and Hungary*

Netflix is just a channel, and a channel is a channel. *Mads Arnbjörn Rasmussen, CTO Cloud and Video, Huawei*

OTT bundling

Key themes

- Cord-cutting is mainly a US problem, driven by high ARPU bundles
- In Europe customers can't save that much by "unbundling"
- Operators have much to gain and little to lose by bundling OTT with their products
- It's not just FAANGS, each market has lots of local OTT

What was said

OTT has driven some video unbundling, but we'll see a rebundling through content aggregation, because that is what customers want. *Arran Tindall, SVP Commercial and Content Distribution, Viacom*

Consumers say they want choice, but in reality they are confused by too much choice. *Bernd Riefler, Co-founder, Veed analytics*

The reality is that there is very high churn in standalone OTT even for Netflix, so the best thing to do for them is partner with cable – this re-bundling is already happening. *John Vonk, VP Pricing and planning, Comcast*

Cable has to get faster in connecting with the full OTT selection – look at how Roku does it. *Greg Gentshev, VP Video, Gracenote*



Laurence Miall-d'Aout,
Liberty Global



Tony Hanway, Virgin Media
Ireland



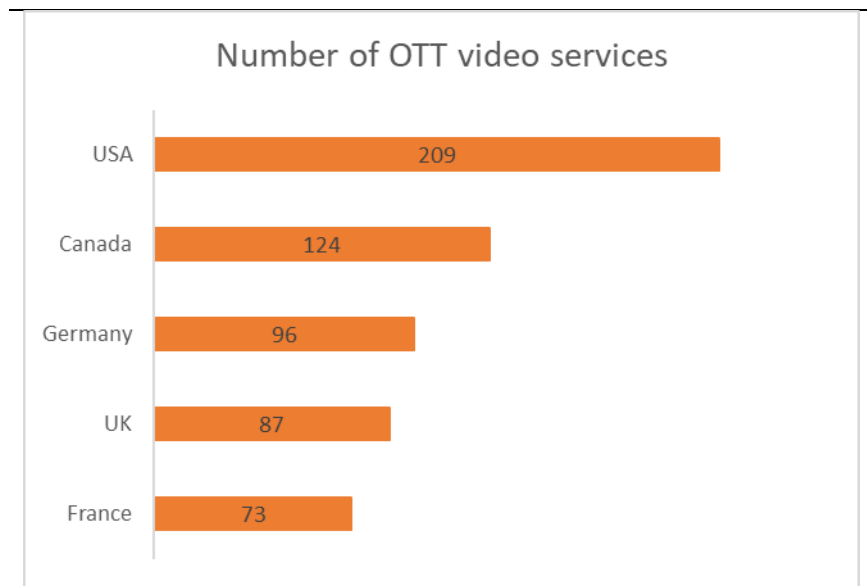
Arran Tindall, Viacom



Bernd Riefler, Veed
Analytics and Greg
Gentshev, Gracenote

We added Netflix in January 2017 and it became our third watched channel, our NPS improved and churn declined. *Paul Farrell, VP Commercial, Virgin Media*

Figure 2: Number of OTT services by country



Source: Parks Associates Data



Paul Farrell, Virgin Media

Developing the cable product offer: Bundling / mobile

Key themes

- Simple bundling of multiple products per household is old news
- Adding mobile remains important
- Mobile and, increasingly video, are individual not household products and have to be provided accordingly

What was said

The traditional bundle has been driven by operator need to drive volume, not by consumer needs. We have done a bad job of delivering perceived value. The bundle has to be more customer driven. *Paul Farrell, VP Commercial, Virgin Media*

There is still a role for the bundle to aggregate access, but it has to target varying demographics. *Guy Bisson, Research Director, Ampere Analysis*

Cable still focusses on households and not individuals – this has to change. *Michiel Sanson, VP Sand Cherry Associates*



Guy Bisson, Ampere Analysis

Gen Y, Z and so on are 1/3rd of the population. How do we cater for micro-customer needs? *Doron Hacmon, Chief Product Officer, Liberty Global*

Telenet is on the path to extreme customer-centricity. We started on products, moved to customers, now we try to provide tailored customer products. When registering for the WiGo product customers had to register a personal ID for each household member – this is the first step. *Kim Smets, Director market and Customer Insights, Telenet*

If we get a fixed-mobile offer right, then it is a powerful tool for customer satisfaction and retention. There is an industry logic behind European consolidation. *Manuel Cubero, Chief Commercial Officer, Vodafone Germany (responding to question about VOD-LIB deal]*

We've just hired Dana Strong for our mobile business from Liberty Global, so yes, we are learning a lot from the European experience. But I'm not sure any of us have cracked the code of getting good synergies. *John Vonk, VP Pricing and planning, Comcast*



Kim Smets, Telenet

AI/ML/Big Data: lots of talk, some action

Key themes

- The Artificial Intelligence / big data / machine learning theme was mentioned in most panel sessions
- Cable recognises that it must master these techniques both to understand and service customers, and to operate more efficiently.
- There are organisational and cultural barriers to fully embracing a data-centric way of working

What was said

Artificial Intelligence is like teenaged sex – everyone wants to do it, everyone talks about it, but nobody knows how. *Laurence Miall-d'Aout, VP Advanced Advertising, Liberty Global*

Before cable operators talk about AI, they should talk seriously about data collection and organisation. *Jacques-Edouard Guillemot, SVP Executive Affairs, Kudelski Group*

The industry challenge is, how do we persuade a 20-year-old data scientist to work for our industry. We have to build a real infrastructure. Legacy businesses are very poor at collecting unified data. And 70% of big data initiatives are unprofitable. *Laurence Miall-d'Aout, VP Advanced Advertising, Liberty Global*

99% of the value in AI today is simple data mapping – statistical analysis of data to find patterns that computers could not find before. So, a machine learning to business outcome. *Laurence Miall-d'Aout, VP Advanced Advertising, Liberty Global*

It's great to have data, but you have to apply algorithms and intelligence. We could use our own proprietary customer data to differentiate us from the GAFA competition. *Laurence Miall-d'Aout, VP Advanced Advertising, Liberty Global*

Half of Comcast's marketing floor is now data scientists. *Michiel Sanson, VP Sand Cherry Associates*

We are working to use AI to improve the operations of our networks. *Chris Lammers, CTO CableLabs*

AI will dramatically increase our subjugation to algorithms. *Michael Powell, President & CEO NCTA*

Liberty Global data initiatives

Liberty Insights – takes anonymised customer viewing data to use for targeted advertising (work with Sky Adsmart).

Use data to target internal marketing spend effectively.

Persuading advertising brands to turn away from Google/Facebook back to broadcasters.

Targeted TV advertising at Telenet has already improved SBS advertising positioning.

You can collect all the data you want but you only create value by solving a customer problem. *Kim Smets, Director market and Customer Insights, Telenet*

AI is not about product sales, it can save cost by eliminating wasteful activity – replacing helpdesk calls, eliminate poor marketing and so on. *Michael Samson, VP Sand Cherry Associates*

We no longer have an information advantage over our customer, they have perfect knowledge at their fingertips. *Doron Hacmon, Chief Product Officer, Liberty Global*

The most exciting thing is that the whole organisation is using the data we collect from users through a machine learning approach – we are prioritising our resources more efficiently. *Thomas Helbo, CTO Com Hem*

Comcast has said that it is working on using blockchain technology in audience participation. *Ted Hall, Research Director, IHS Markit*

In 2018 we're doubling down on blockchain. We are trying to solve real-world problems with blockchain: internal experiments are already underway around advanced advertising alongside Disney and Cox Communications that will be used to match data sets without sharing consumer data. Other experiments are underway looking at applications around royalty tracking and energy. *Gil Beyda, managing director of Comcast Ventures, cited in TechCrunch magazine*

Online SVOD gives us great data to improve the product. The lack of access to cable data is becoming a problem. *Carter Pilcher, CEO Shorts International*

Data tells you which pond to fish in, but it won't write a script or hire talent. *Bruce Mann, Chief Programming Officer, Liberty Global*

Data only really works if it is connected end to end in the organisation. GAFA do this well, but cable remains fragmented. *Jacques-Edouard Guillemot, SVP Executive Affairs, Kudelski Group*



Thomas Helbo, Com Hem



Jacques-Edouard Guillemot,
Kudelski Group

What's new in Cable technology? More speed, more mobility, IP.

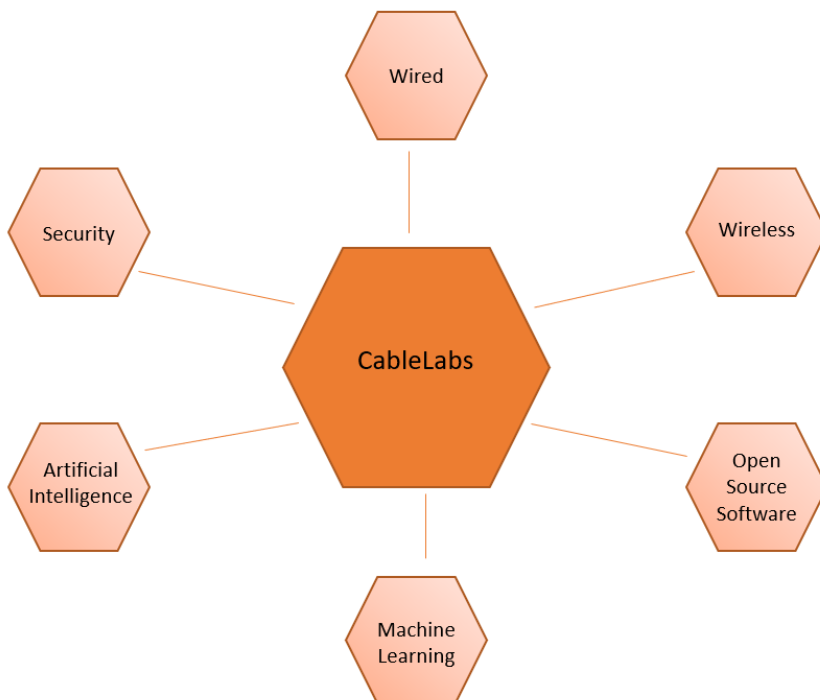
Key themes

- A few years back, cable technology priorities were simply higher speeds and better set top boxes
- The speed roadmap is clear for a while, but priorities have expanded
- Mobile is a major priority, as is in-home delivery (WiFi)
- Transitioning video delivery to IP is inevitable
- Improving the user experience through tech and rapid innovation

What was said

Two years ago we engaged on a pivot – we started to focus not just on 2-3 years out, but 7-10 years in the future. *Chris Lammers, CTO CableLabs*

Figure 3: CableLabs schematic: future technology focus



Source: CableLabs presentation

We have tech capable of 10GBps but are looking beyond that to 100GBps. *Chris Lammers, CTO Cable Labs*

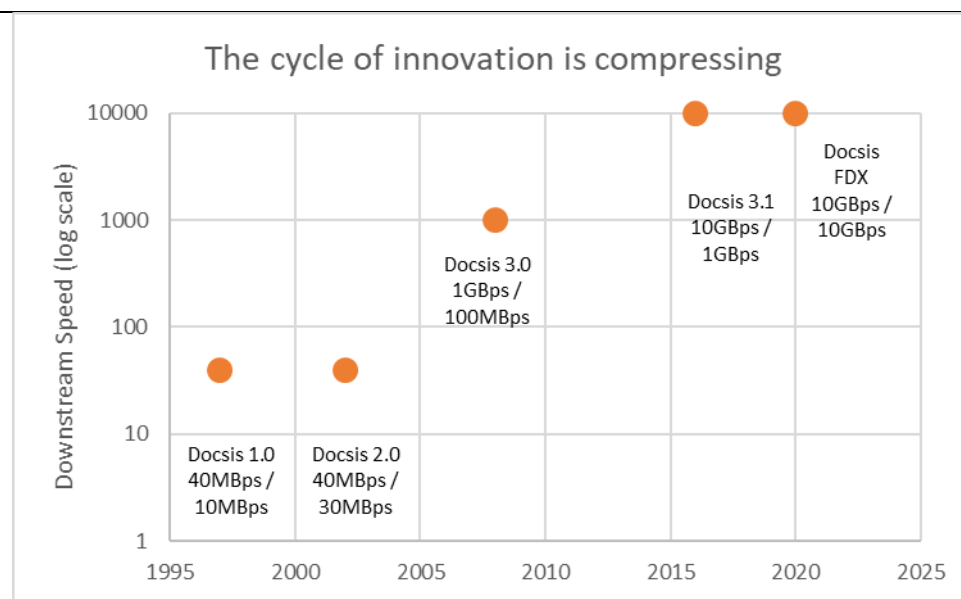
Cable tries to “upsell” customers on low broadband speeds to upgrade. Actually, the guys who most want to upgrade are already on high speeds. *Brett Sappington, Senior Director of Research, Parks Associates*

We’re looking at HFC, fibre and wireless to keep our networks competitive. Half of CableLabs’ membership is an MNO or an MVNO, in Europe it is close to 100%. *Chris Lammers, CTO CableLabs*



Chris Lammers, CableLabs

Figure 4: CableLabs data: network speed development



Source: CableLabs data (upstream/downstream design speed capability)

TV distribution is changing – IPTV and OTT are growing, OTT is adding live streaming to on-demand. *Mads Arnbjørn Rasmussen, CTO Cloud and Video, Huawei*

Customers shouldn’t be telling the operator about network problems: OSS needs improving. *Mads Arnbjørn Rasmussen, CTO Cloud and Video, Huawei*

IP is the long-term solution: combined with high capacity Docsis networks and cloud-based IT, it will enable a better customer proposition. *Mads Arnbjørn Rasmussen, CTO Cloud and Video, Huawei*

We are investing heavily in the UK, 2x the pace of before we bought the business. It is a rational market in the UK, no-one is trying to change the fabric, everyone is investing.

Tom Mockridge, CEO Virgin Media

We see usage on our networks growing so fast, the end result will be that 5G is complementary. There is recognition that 5G is some way off and will require a lot of investment. *Tom Mockridge, CEO Virgin Media*

I can put software solutions into the market within three weeks, because I control the end to end service. *Pedro Bandeira, Head of Product Development, NOS*

Video distribution: IP all the way

Key themes

- Changing video consumption patterns mean that IP distribution is inevitable
- STBs will change, and the focus has to be on multi-device usage
- Content discovery and selection will be in the cloud

What was said

By 2020 there will be 3X as many devices connected to the internet as people, and 80% of traffic will be video. *Bruce McLelland, CEO Arris*

You cannot virtualise the layer 1 connectivity network, the problem of in-home wireless networks is yet to be solved. *Bruce McLelland, CEO Arris*

Soon the STB will become just a device in the TV ecosystem. *Thomas Helbo, CTO Com Hem*

We are still at the early stages of moving cable video to IP, but it will happen. *Bruce McLelland, CEO Arris*

It is the changing programming landscape that is driving video to IP. A decade from now QAM networks will be gone in the US. Ex-satellite, we are probably only 2-3 years away from mostly-IP. To allow devices to work together properly, you need IP: legacy systems just don't cut it. *Jeff Binder, EVP T-Mobile USA*

Content consumption is at an all time high, but the manner of that consumption is changing. Average viewers spend more time on video than five years ago, just on different devices. The new audience is platform promiscuous, most SVOD users use 2 or 3 platforms. *Wim Ponnet, Chief Strategy Office, Endemol Shine Group*



Pedro Bandeira, NOS



Bruce McLelland, Arris



Wim Ponnet, Endemol Shine Group

Our own STP will be an android TV solution – we can update when we want through small releases, not big ones. *Thomas Helbo, CTO Com Hem*

Content discovery has to have some surprises – channel zapping uncovered stuff you never knew existed. There has to be a mix between what I like, and an element of surprise. *Bernd Riefler, Co-founder, Veed analytics*

Get the speed to the customer: in-home delivery

Key themes

- WiFi is vital to customer experience
- Cable has to help solve these problems
- Additional network speed is useless if in-home delivery is the bottleneck

What was said

Customers don't talk about broadband any more, they talk about their WiFi. We replaced 75% of modems in the last two years. *Tony Hanway, CEO Virgin Media Ireland*

You can get blindsided by futuristic thinking – we still need to focus on the basics – get connectivity into the home. *Tony Hanway, CEO Virgin Media Ireland*

We're trying to move the discussion away from just speed in broadband – it's all about helping customers understand WiFi coverage and set up. We are focussing on best in class WiFi experience. *Robert Redeanu, CEO UPC Romania and Hungary*

Our responsibility as a provider is moving from the wall plate to the air. *Doron Hacmon, Chief Product Officer, Liberty Global*

The quest for scale: consolidation and expansion

Key themes

- Everyone expects more deals
- Cable -cable and cable-mobile are well-established
- Cable – content is coming to the fore (Comcast, Sky)
- Cable is also investing to build new plant

What was said

There is frenzied dealmaking in the broader sector. *Kate Bulkley, Journalist*

Scale is more important than ever. *Robert Redeanu, CEO UPC Romania and Hungary*



Track session



Exhibition area



Round table debate

From an industry perspective, consolidation makes a lot of sense. In China there are fewer players than in some individual European markets. *Manuel Cubero, Chief Commercial Officer, Vodafone Germany*

Our industry has been a consolidation story for four decades – Virgin Media used to be 600 franchises. *Tom Mockridge, CEO Virgin Media*

The integration of our three companies is still going through, we launched a new unified brand (PYUR) and launched new products. *Timm Degenhardt, CEO Tele Columbus*

If we get a fixed-mobile offer right, then it is a powerful tool for customer satisfaction and retention. There is an industry logic behind European consolidation. *Manuel Cubero, Chief Commercial Officer, Vodafone Germany (responding to question about VOD-LIB deal)*

Why Sky? We think that scale is really important, and we see lots of opportunity to expand overseas. NBCU has done really well under our ownership, so we are excited. *John Vonk, VP Pricing and planning, Comcast*

Disney and Comcast bidding for Sky is an affirmation that our subscription businesses are doing the right thing. *Tom Mockridge, CEO Virgin Media*

The price of providing a Gigabit to a home is so small for HFC compared to DSL or mobile, we are investing heavily. *Manuel Cubero, Chief Commercial Officer, Vodafone Germany*

We are always bringing the glass closer to the building. *Timm Degenhardt, CEO Tele Columbus*

We have added 500k homes in all 5 East European countries, scale is becoming more important. Eastern European cable is still very fragmented, so consolidation is still possible, but we like to take the process in our own hands and build. *Robert Redeleanu, CEO UPC Romania and Hungary*



Timm Degenhardt, Tele Columbus, Robert Redeleanu, UPC Romania and Hungary and Kate Bulkey, Journalist



Greg Gentschev, Gracenote and John Vonk, Comcast

Regulation

Key themes

- Especially in the USA, regulators should worry less about theoretical net neutrality and more about global internet company dominance
- There is a perceived unfairness about competition policy – global FAANG deals are approved more easily than modest in-country operator consolidation
- What matters to consumers is privacy, security, news manipulation and behavioural risks
- GDPR is broadly seen as a positive for cable

What was said

Net Neutrality is completely dominating communication debate, but it is completely irrelevant and will have little real world impact. The open internet won't change, whatever the outcome of the current debate. *Michael, President & CEO NCTA*

We [cable] don't want to slow down the internet, we are spending heavily to speed it up. *Michael Powell, President & CEO NCTA*

Consumers are deeply concerned about online privacy. *Michael Powell, President & CEO NCTA*

The whole regulatory situation is completely absurd: Facebook bought WhatsApp in about sixty days, it took me 14 months to get a mobile deal approved in Ireland. *Tony Hanway, CEO Virgin Media Ireland*

GDPR in May will put privacy back in customer hands. Yes, we must be compliant and build customer trust, but actually this is an opportunity. GDPR allows you to collect more data if you do it well. The opt-out creates trust. These are exciting times and we should not be afraid of it. *Laurence Miall-d'Aout, VP Data and Advanced Advertising, Liberty Global*

You'd be insane to take any approach other than complete openness with the customer. *Jeff Weber, CEO zone-TV*

Major issues for policymakers

Consumer privacy

Technology addiction / mental health

Fake news and election manipulation

Cybersecurity

Market power

Michael Powell, President & CEO NCTA

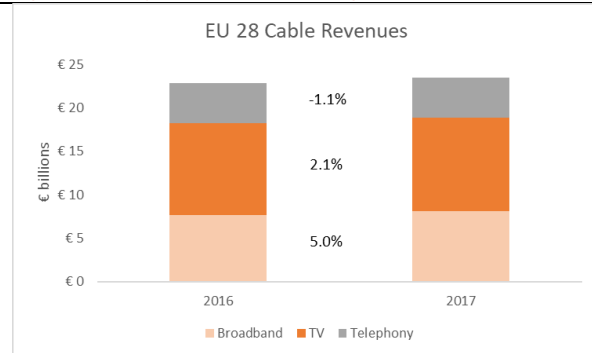


Michael Powell, NCTA

Cable industry data

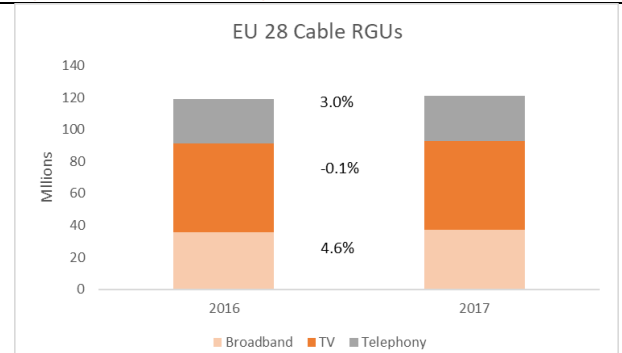
Cable Europe provided aggregate European cable industry data compiled by IHS Markit, and IHS also highlighted some key market developments.

Figure 5: European Cable revenues grew 2.4% in 2017



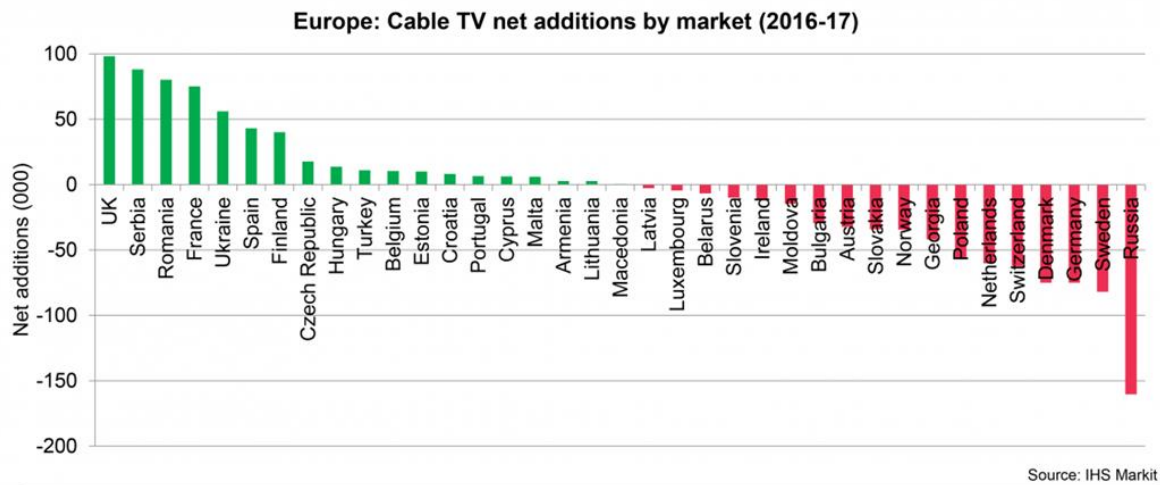
Source: Cable Europe / IHS

Figure 6: European RGUs grew 2% in 2017



Source: Cable Europe / IHS

Figure 7: Wide variation by country



Source: IHS Markit

Source: IHS Markit

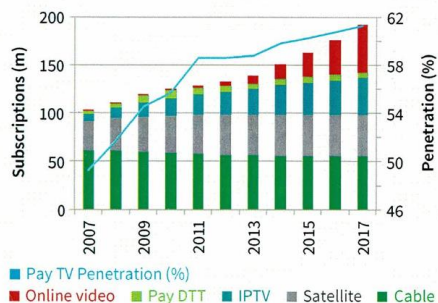
Sector highlights from Ted Hall, Research Director, IHS Markit

- There are more video subscriber growth markets than decliners in European cable, but there is an aggregate loss of video subscribers in Europe. However, annual losses are declining from 7 to 6 figures.
- The impact of digitalisation has seen some losses to IPTV and satellite, but also a growth in ARPU.
- Broadband remains the main engine of growth, with cable at the forefront of NGA deployment in Europe. But competition from VDSL and fibre is growing.
- Traditional TV is thriving in the face of new entrant competition, but OTT is the big video story. Netflix became Europe's largest video provider in subscription terms in 2017 (ahead of Sky and Liberty Global), though in revenue terms it is a long way behind.
- The big internet firms are shaking up content with their global scale. So far the most prized sports rights remain with Pay-TV operators – new entrants can't make a strong enough business case to invest in them. Original series are a more cost-effective investment than premium sport.
- Triple play remains the core for cable, with more operators making forays into mobile and some exploring smart homes – perhaps the fifth play?

Figure 8: IHS cable analysis

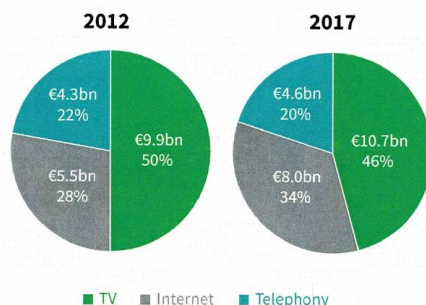
An evolving business that retains a strong foothold in TV and is forging growth in broadband

Pay TV and online video subscriptions in EU28



- In Europe, pay TV is still growing – the cord-cutting trend seen in North America has not spread
- And although cable TV has been in decline, more European households use it as their primary mode of reception than any other distribution technology

Cable revenue by source in EU28



- Cable has also reduced its reliance on TV, with DOCSIS 3.0's success putting broadband on the path to becoming operators' biggest revenue generator

Source: IHS Markit

The awards

This year for the first time, Cable Congress welcomed **Project Kairos**, a global event series aimed at connecting high-potential start-ups with industry and investment through pitching, showcasing and learning opportunities.

The winner was Media Distillery, a Dutch start-up providing unique AI technology to understand what's inside video, thanks to next-generation metadata in real-time at an unparalleled scale.

The judges were impressed by Media Distillery's pitch, and the combination of a proven track record and broad potential for future opportunities, with many possibilities for them to develop new use-cases and enter new markets such as security or smart cities.

The **Cable Europe Fellow Award**, which celebrates an employee within our industry which has made a positive contribution, was given this year to Paulo Rosaria, Manager Fixed Network Technology for NOS. Paulo was recognised for his hard work to help define the Access Network strategy of NOS, working across evaluation, testing, strategy and implementation in a hyper competitive market where HFC and FTTH coexist.

Source: Frank Knowles



Roland Sars, Media Distillery and Matthias Kurth, Cable Europe



Paulo Rosaria, NOS, Caroline van Weede, Cable Europe and Matthias Kurth, Cable Europe

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