

Denmark

Denmark key data 2017

| | | | |
|--|-------|---|-------|
| Population (m) | 5.7 | Consumer spending on digital video and TV VoD (EUR m) | 317.6 |
| TV households (m) | 2.3 | Comparison with 2016 (%) | 30.8 |
| Consumer spending on physical video software (EUR m) | 39 | Exchange rate EUR/DKK | 7.46 |
| Comparison with 2016 (%) | -23.2 | | |

Market Developments

- In 2017, the Danish market for physical discs experienced a steady decline of 19% in value and 27% in units compared to 2016. The DVD market declined by 28% in value and 38% in units, while the BD market saw a 10% increase in value and 8% in units.
- A healthy online distribution market as well as the closing down of several physical retailers in 2016 contributed to the dramatic decline of physical formats' market performance.
- Despite the decrease, the physical market is still representing value close to DKK 260 million DKK (€ 34,5 million).
- The market development affects almost exclusively catalogue titles older than 12 months - subscription-based streaming services like Netflix and HBO have clearly taken a very large part of this market (approximately 42% of Danish households have a Netflix subscription). However, the industry is seeing an increase in the performance of physical formats on new release titles. Throughout all digital video formats, there is an increase of 33%, leaving the digital market at a value of more than DKK 2.2 billion (€ 297,4m). Subscription-based streaming services are accounting for DKK 2 billion DKK (€ 274,3 million) in comparison.

Blocking of access to websites offering illegal access to copyright content

- 596 million visits to sites offering illegal copyright content were registered in 2017, resulting in a substantive economic loss. Visits to illegal sites have increased considerably by 67% compared to 2016. The access to and use of illegal content via mobile devices has grown in 2017. Blocking of access to infringing websites is therefore considered the most effective tool in fighting illegal online services. Court-sanctioned blockings have been complemented by an innovative, user-targeted public awareness initiative, "Share With Care", based on a joint communication platform between rightholders, ISPs and the Danish Ministry of Culture. Blocked websites show a message with information on why the access is blocked and re-directs users to the "Share With Care" website with a list of legal content services.
- In 2017, the Danish Rights Alliance also had an opportunity to close decentralized illegal services and their "mirror sites" which allowed access to the illegal service, without the need for a new court decision each time an updated version of the illegal service appears.
- On average, blocking access to an illegal web site reduces the number of visitors from Danish IP addresses by 75%.

Disruption Machine

- In collaboration with a wide range of online stakeholders, the Danish Rights Alliance has developed a tool called the "Disruption Machine". The machine consists of a list of illegal sites that are shared in a network

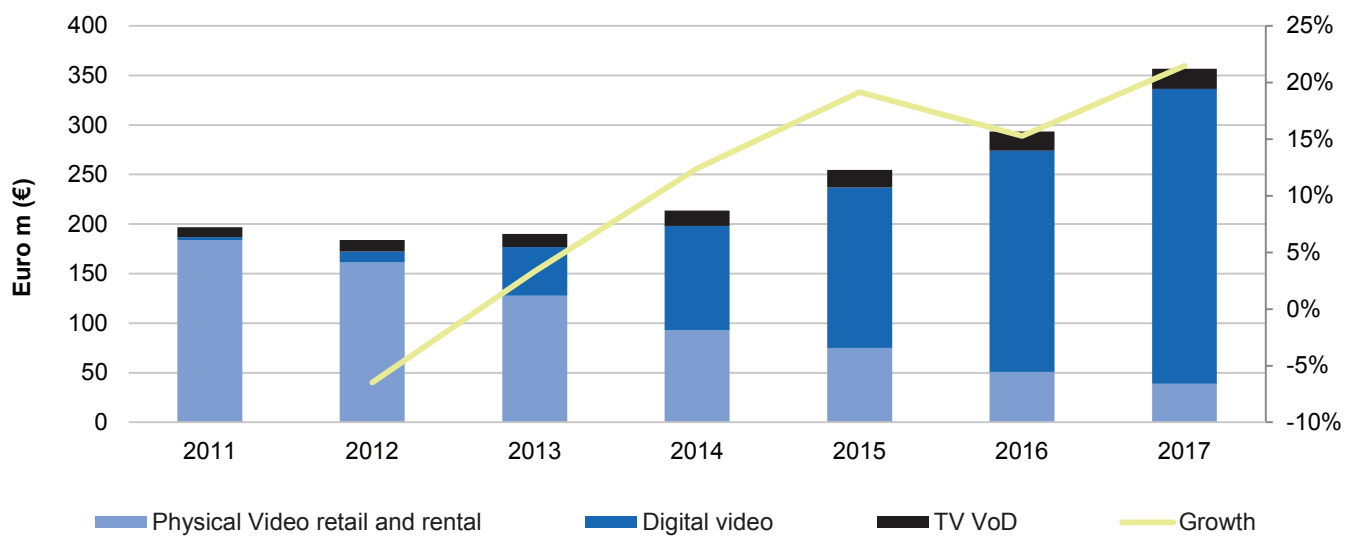
of online stakeholders and collaborators ensuring that access to illegal sites is blocked, so that no ads are sent to them. The purpose of the “Disruption Machine” is to stop traffic to and cash flow to the illegal services. The list currently contains more than 2,500 illegal sites and is updated on a monthly basis. So far, many advertisers and Danish ISPs have subscribed to the list and the Danish Rights Alliance pursues further participation by various payment services.

IP Task Force

- In November 2017, the Danish Minister of Justice set up an IP Task Force to address organised IP crime for a trial period of six months. Efforts are made for a permanent entity. Europol research indicated that IP crime is one of the most lucrative criminal activities often closely linked to organized crime.

This commentary was provided by the DVA, the Danish Video Association.

Consumer spending by segment



Video market: Denmark

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 16/17 % |
|--|-------|-------|-------|-------|-------|-------|-------|---------|
| GENERAL | | | | | | | | |
| Population (m) | 5.6 | 5.6 | 5.6 | 5.7 | 5.7 | 5.7 | 5.7 | 0.4 |
| TV households (m) | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 0.8 |
| Population Total Europe (m) | 622.4 | 623.8 | 624.9 | 626.1 | 627.7 | 629.4 | 630.9 | 0 |
| TV households Total Europe (m) | 250.8 | 253.2 | 255.0 | 257.3 | 259.3 | 261.3 | 263.2 | 1 |
| Broadband households (m) | 1.9 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 1.0 |
| Nominal GDP (EUR m) | 247.8 | 254.6 | 258.8 | 265.8 | 271.7 | 277.4 | 288.0 | 3.8 |
| Consumer price index (100 in 2010) | 107.8 | 102.2 | 106.2 | 106.8 | 89.5 | 89.7 | 92.6 | 3.2 |
| Exchange rate EUR/DKK | 7.46 | 7.44 | 7.46 | 7.46 | 7.46 | 7.45 | 7.46 | 0 |
| DVD Video player/recorder (%) | 91.3 | 79.4 | 88.9 | 75.8 | 73.9 | 72.2 | 70.1 | -3.0 |
| Blu-ray Disc player/recorders penetration (%) | 13.6 | 20.5 | 27.2 | 29.0 | 30.3 | 28.6 | 28.0 | -2.2 |
| DVD Video player/recorder Total Europe (%) | 76.7 | 76.1 | 73.9 | 71.8 | 69.2 | 67.1 | 64.5 | -3.9 |
| Blu-ray Disc player/recorders penetration Total Europe (%) | 6.8 | 11.2 | 15.4 | 18.4 | 20.7 | 21.7 | 22.3 | 2.5 |

Total video software market

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 16/17 % |
|--|---------|---------|---------|---------|---------|---------|----------|---------|
| CONSUMER LEVEL ALL VIDEO | | | | | | | | |
| <i>Total market figures include consumption of both physical and digital video</i> | | | | | | | | |
| Total spending on video (DKK m) | 1,467.8 | 1,369.2 | 1,418.1 | 1,595.1 | 1,901.3 | 2,187.7 | 2,659.4 | 21.6 |
| Total spending on video (EUR m) | 196.7 | 184.0 | 190.1 | 213.7 | 254.7 | 293.6 | 356.6 | 21.5 |
| Growth (%) | | -6.5 | 3.3 | 12.4 | 19.2 | 15.3 | 21.5 | |
| Total spending on video Total Europe (EUR m) | 9,124.9 | 8,847.3 | 8,466.8 | 8,587.3 | 9,356.6 | 9,718.8 | 10,448.2 | 7.5 |
| CONSUMER LEVEL PHYSICAL VIDEO – TOTAL SPENDING | | | | | | | | |
| <i>Total market figures include consumption of legacy formats not broken out separately (eg, VHS, HD-DVD, UMD) where relevant.</i> | | | | | | | | |
| Physical video rental (DKK m) | 255.3 | 229.1 | 200.6 | 130.6 | 92.0 | 57.5 | 33.4 | -41.9 |
| Physical video rental (EUR m) | 34.2 | 30.8 | 26.9 | 17.5 | 12.3 | 7.7 | 4.5 | -41.9 |
| Physical video rental Total Europe (EUR m) | 984.8 | 865.3 | 683.8 | 526.9 | 430.8 | 293.7 | 213.4 | -27.3 |
| Physical video retail (DKK m) | 1,116.7 | 971.1 | 751.5 | 561.6 | 469.2 | 320.9 | 257.4 | -19.8 |
| Physical video retail (EUR m) | 149.7 | 130.5 | 100.7 | 75.3 | 62.9 | 43.1 | 34.5 | -19.9 |
| Physical video retail Total Europe (EUR m) | 7,193.4 | 6,606.9 | 5,808.7 | 5,181.8 | 4,753.6 | 3,991.3 | 3,317.4 | -16.9 |
| Physical video software (DKK m) | 1,371.9 | 1,200.1 | 952.0 | 692.2 | 561.2 | 378.4 | 290.7 | -23.2 |
| Physical video software (EUR m) | 183.9 | 161.3 | 127.6 | 92.8 | 75.2 | 50.8 | 39.0 | -23.2 |
| Physical video software Total Europe (EUR m) | 8,178.2 | 7,472.2 | 6,492.5 | 5,708.7 | 5,184.4 | 4,285.0 | 3,530.9 | -17.6 |
| CONSUMER LEVEL DIGITAL VIDEO (OTT) – TOTAL SPENDING | | | | | | | | |
| <i>The purchase or rental of films and TV series delivered over the open internet through transactional models (also known as EST, DTO, Internet VOD) or on a subscription basis. This category specifically excludes sports, live events and adult content to ensure it is comparable to physical video data.</i> | | | | | | | | |
| Retail digital video (DKK m) | 7.0 | 28.1 | 44.7 | 64.6 | 74.9 | 84.0 | 91.3 | 8.7 |
| Retail digital video (EUR m) | 0.9 | 3.8 | 6.0 | 8.7 | 10.0 | 11.3 | 12.2 | 8.6 |
| Rental digital video (DKK m) | 11.4 | 22.4 | 35.4 | 49.9 | 60.6 | 69.7 | 80.5 | 15.4 |
| Rental digital video (EUR m) | 1.5 | 3.0 | 4.8 | 6.7 | 8.1 | 9.4 | 10.8 | 15.3 |
| Subscription digital video (DKK m) | 3.3 | 30.8 | 287.4 | 672.3 | 1,072.2 | 1,509.1 | 2,046.6 | 35.6 |
| Subscription digital video (EUR m) | 0.4 | 4.1 | 38.5 | 90.1 | 143.6 | 202.5 | 274.5 | 35.5 |
| Total digital video (DKK m) | 21.8 | 81.4 | 367.5 | 786.8 | 1,207.7 | 1,662.9 | 2,218.4 | 33.4 |
| Total digital video (EUR m) | 2.9 | 10.9 | 49.3 | 105.4 | 161.8 | 223.2 | 297.5 | 33.3 |
| Total digital video Total Europe (EUR m) | 393.6 | 703.5 | 1,232.2 | 2,012.1 | 3,152.8 | 4,322.7 | 5,708.3 | 32.1 |
| CONSUMER LEVEL PAY TV TRANSACTIONAL VOD – TOTAL SPENDING | | | | | | | | |
| <i>The rental of film and TV content on a transactional (VoD, NVoD/PPV) basis via cable/satellite/IPTV services. These, paid for at the point of consumption, transactions occur only on set-top-boxes or through online services provided as part of a wider pay TV package to which consumers must subscribe prior to purchase. This category specifically excludes sports, live events and adult content to ensure it is comparable to physical video data.</i> | | | | | | | | |
| Pay TV TVOD (DKK m) | 74.1 | 87.8 | 98.5 | 116.1 | 132.3 | 146.4 | 150.2 | 2.6 |
| Pay TV TVOD (EUR m) | 9.9 | 11.8 | 13.2 | 15.6 | 17.7 | 19.6 | 20.1 | 2.6 |
| Pay TV TVOD Total Europe (EUR m) | 553.1 | 671.6 | 742.1 | 866.5 | 1,019.4 | 1,111.2 | 1,209.1 | 8.8 |

Notes: 1) Consumer level digital video (OTT) and pay TV transactional VOD figures may differ from locally published figures due to the application of different definitions. 2) Historical numbers in this section may differ from those published in previous years owing to changes in IHS Markit methodology. 3) The current online figures are a snapshot of the market in June 2017. Figures are updated regularly and so it may not be possible to compare directly to figures published after this date. 4) Total Europe include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, UK, Croatia, Czech Republic, Hungary, Poland, Russia, and Slovakia.

Key players in the market (in alphabetical order)

Physical

- Bilka (Danish Supermarket)
- CDON.dk
- Coolshop.dk
- dvdcity.dk
- Dvdoo.dk
- Elgiganten
- Føtex (Danish Supermarket)
- Gucca.dk
- imusic.dk
- Kvickly (Coop)
- Rema1000
- SuperBrugsen (Coop)

Digital

- Amazon Prime
- Blockbuster
- Canal Digital
- C-more
- Danishdox.com
- Dansk Filmskat
- Dplay
- DR TV
- Filmstriben
- Google Play
- HBO
- iTunes
- Netflix
- Plejmo.dk
- SF Anytime
- Sofarækken
- Viaplay
- Wao

Share of European market



Physical retail
2.1%



Physical rental
1.0%



OTT
5.2%



Pay TV TVOD
1.7%

Average home entertainment spending



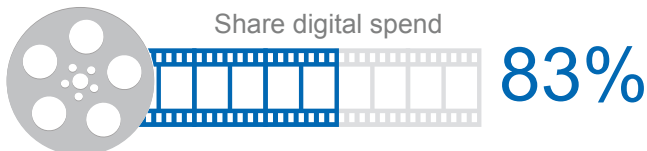
Spending per TV household (EURO m)
€153.4



Spending per broadband household (EURO m)
€158.00



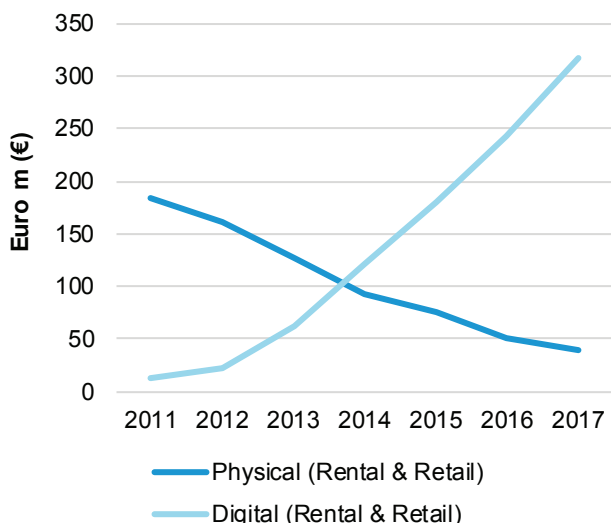
Digital share of spend vs. broadband speed



Broadband download speed rank
(ranked across the 9 IVF countries)

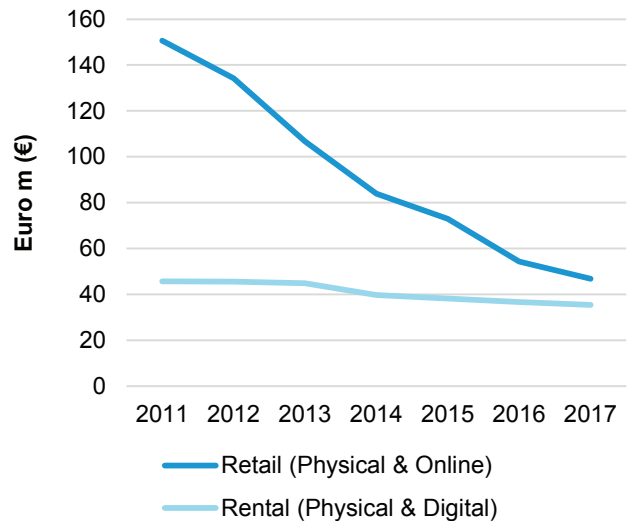
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Comparison Physical vs Digital



Digital (Rental & Retail) includes SVOD data

Comparison Retail vs Rental



Rental (Physical & Digital) excludes SVOD data