Germany

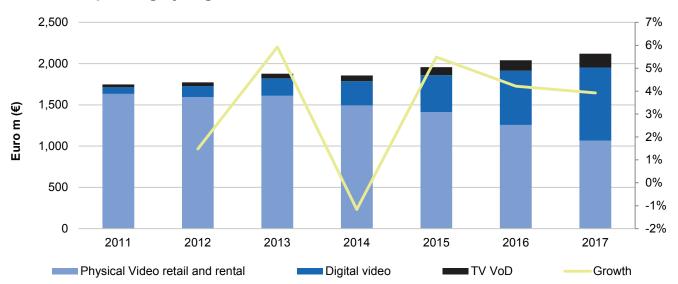
Germany key data 2017

Population (m)	83.2	Comparison with 2016 (%)	-15.2
TV households (m)	39.3	Consumer spending on digital video and TV VoD (EUR m)	1053.5
Consumer spending on physical video software (EUR m)	1066.9	Comparison with 2016 (%)	34.6

- In 2017, the total German video market reached its second best result since the start of collection of video market data. The total turnover grew by 3% compared to 2016.
- The main driver of this results was the strong market performance for digital distribution services with an
 increase in turnover of 41% compared to 2016. Subscription-based services recorded the biggest increase
 of 50%. Digital rental models reached a total market share of 27%, but EST and TVoD almost performed
 strongly, increasing by 33% and 21%, respectively.
- However, the physical market still remains the strongest segment in the German video market with a total share of 53%, though dropping 8% compared to the previous year. The biggest loss was seen in DVD retail, with a decrease of 15% in 2017.
- The TVoD market increased by 21% and was for the first time performing better than the physical rental market which declined by 30%.
- In 2017, the German video market attracted 22.7 million consumers, translating into 33% of the population of 10 years and older.
- The best-selling titles in 2017 were "Phantastische Tierwesen und wo sie zu finden sind", followed by "Rogue One: A Star Wars Story" and "Guardians of the Galaxy Vol. 2".

This commentary was provided by the BVV, the German Video Association.

Consumer spending by segment



Video market: Germany

	2011	2012	2013	2014	2015	2016	2017	16/17 %
GENERAL								
Population (m)	80.3	80.4	80.6	81.0	81.7	82.5	83.2	0.8
TV households (m)	37.2	37.6	37.9	38.6	38.9	39.1	39.3	0.6
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)	23.9	24.6	25.3	26.2	27.6	29.7	31.8	7.3
Nominal GDP (EUR m)	2,699.3	2,759.5	2,830.8	2,937.0	3,035.9	3,129.8	3,255.8	4.0
Consumer price index (100 in 2010)	107.2	101.0	106.0	106.8	89.5	89.7	93.0	3.7
DVD Video player/recorder (%)	74.4	72.7	64.4	61.6	58.7	55.6	51.1	-8.1
Blu-ray Disc player/recorders penetration (%)	8.9	13.5	17.7	21.1	24.4	25.1	25.3	0.5
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								
Total market figures include consumption of both phys	sical and digit	al video						
Total spending on video (EUR m)	1,747.0	1,772.8	1,877.8	1,856.0	1,957.8	2,040.3	2,120.3	3.9
Growth (%)		1.5	5.9	-1.2	5.5	4.2	3.9	
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

Total market figures include consumption of legacy formats not broken out separately (eg, VHS, HD-DVD, UMD) where relevant.

Physical video rental (EUR m)	239.1	233.3	215.8	188.6	165.0	104.7	72.3	-31.0
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 (EUR m)	1,395.0	1,362.0	1,393.6	1,304.5	1,248.2	1,153.0	994.6	-13.7
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 (EUR m)	1,634.1	1,595.3	1,609.3	1,493.1	1,413.2	1,257.7	1,066.9	-15.2
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

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.

Retail digital video (EUR m)	32.7	53.6	80.8	102.0	109.4	115.9	130.7	12.8
Rental digital video (EUR m)	28.0	52.8	80.8	105.3	123.7	134.5	144.6	7.5
Subscription digital video (EUR m)	17.4	26.9	50.8	85.4	214.7	407.1	611.9	50.3
Total digital video (EUR m)	78.1	133.3	212.4	292.7	447.9	657.6	887.1	34.9
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

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.

Pay TV TVOD (EUR m)	34.8	44.2	56.1	70.2	96.7	125.0	166.3	33.1
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 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

- Amazon
- Media Markt
- Müller Drugstores
- Saturn
- Thalia
- * (transactional + subscriptional)

Digital

- Amazon (*)
- iTunes (transactional)
- Maxdome (*)
- Netflix (subscriptional)
- Sky (*)

Share of European market 2017



Physical retail 33.8%



15.5%



Physical rental 30%



Pay TV TVOD 13.8%

Average home entertainment spending





Spending per TV household (EURO m)

€53.9

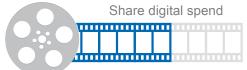




Spending per broadband household (EURO m)

€66.6

Digital share of spend vs. broadband speed

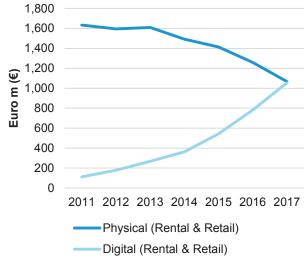


42%

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

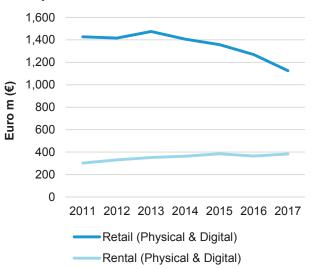


Comparison Physical vs Digital



Digital (Rental & Retail) includes SVOD data

Comparison Retail vs Rental



Rental (Physical & Digital) excludes SVOD data