



OBSERVATOIRE EUROPÉEN DE L'AUDIOVISUEL
EUROPEAN AUDIOVISUAL OBSERVATORY
EUROPÄISCHE AUDIOVISUELLE INFORMATIONSTELLE

Note 2 – Online Advertising In The EU Update 2014

Gilles Fontaine and Christian Grece

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NOTE 2: ONLINE ADVERTISING IN THE EU – 2014 UPDATE

This note, prepared by the European Audiovisual Observatory for the European Commission, is the 2015 update of the 2014 report on Online Advertising. This edition focuses on key trends and figures; it provides:

- In chapter 7, key data at the European level and on a country per country basis.
- In chapter 8, a review of key trends.

Authors: Gilles Fontaine and Christian Grece

1 Executive summary

- The total size of the online advertising market in the EU in 2013 was €27.2 billion, an increase of 11.6% compared to the total of €23.2 billion in 2012.
- Growth rates tend to decrease gradually and stabilize around 12% per year, but still exceed by a big margin GDP growth in Europe and ad spend growth on other media.
- Online ad spend per capita ranges from €138 in the UK to €2 in Romania.
- The top three countries for online ad spend in the European Union in 2014 (United Kingdom, Germany and France) accounted for 66.7% of online advertising in Europe.
- Online drives the advertising market: the global European advertising market modestly grew of 1.4% in 2014. Without online ad spend, the market would have decreased by -2.4%.
- Online has become the second medium in Europe for ad spend, just behind TV advertising. In 2014, Internet advertising was higher than TV advertising in Czech Republic, Denmark, Germany, The Netherlands, Sweden and United Kingdom.
- Among the various online advertising formats, display advertising is regaining market shares since 2011, benefitting from better targeting and the increase in online video viewing.
- Even if, in the EU, Paid-for-Search represents globally a higher share of the online advertising market than display, there are more countries where display achieves a higher market share than Paid-for-Search.
- Google earns approximately 30% of the worldwide advertising market. Facebook is experiencing a rapid growth of its market share, benefitting both from its strong position on mobile and from the introduction of video on its pages. Other well-known Internet brands such as Twitter, Amazon or YouTube capture less than 1% each of the online advertising market.
- Online advertising is driven by a series of innovations:
 - Video ads, already accounting for 16% of display advertising.
 - Programmatic advertising, i.e. the automated placement of ads using algorithms, which drives Media groups to invest in advanced advertising platforms.
 - The fast growing usage of mobile devices to access Internet, opening the path for in-apps advertising. Figures show that the mobile

advertising tend to be even more concentrated than the fixed Internet one and to be dominated by Google and Facebook.

- The growing market share of online advertising captured by social networks.
 - Continuous technical improvements to shorten the path to sales.
 - The future promises of the Internet of Things which will increase the number of screens and therefore the advertising inventory.
- But online advertising also faces some hurdles:
 - The actual viewability of ads is discussed.
 - Advertising viewing metrics can be distorted by traffic fraud (i.e. traffic generated by robots).
 - Ad blockers may improve the user experience on the Internet but also deprive services from an essential source of revenues.

2 Key data

2.1 Sources on the European online advertising market

The main figures freely available for the European online advertising market are published by IAB Europe¹ in the IAB Adex Benchmark and are established by IHS. The IAB and IHS establish figures on online advertising spending in Europe based on data received from 26 European countries, of which 21 are members of the European Union (EU countries missing are Cyprus, Estonia, Latvia, Lithuania, Luxembourg, Malta and Portugal and non-EU countries included are Norway, Russia, Serbia, Switzerland and Turkey). Therefore, when referred to “Europe” the figures are not representative of the European Union but the “Europe” of the 26 countries participating in the IAB study.

In this note, we rely on the figures published by IAB Europe and IHS and have tried, whenever possible, to compile figures for the 21 EU countries by excluding the non-EU countries (indicated in the titles of figures and tables whenever available by “EU countries”). Other sources are Warc² (which does not publish figures broken down according to online advertising categories but publishes figures for the overall advertising market by European countries) in order not to only rely on a unique source for data on the online advertising market. Warc data has been used for the first section (and the country fact sheets) in order to provide data on Internet and television advertising in the EU and the rises and falls over the years. As 2014 data for some countries are not yet available, providing a total for the EU is not yet possible.

Also, it should be noted that data published in the Adex Benchmark report are adjusted, estimated (through modelling) and recalculated on a different basis for each country as the methods of data collection and treatment vary from country to country. Therefore, IHS standardises the data in order to make figures comparable across countries.

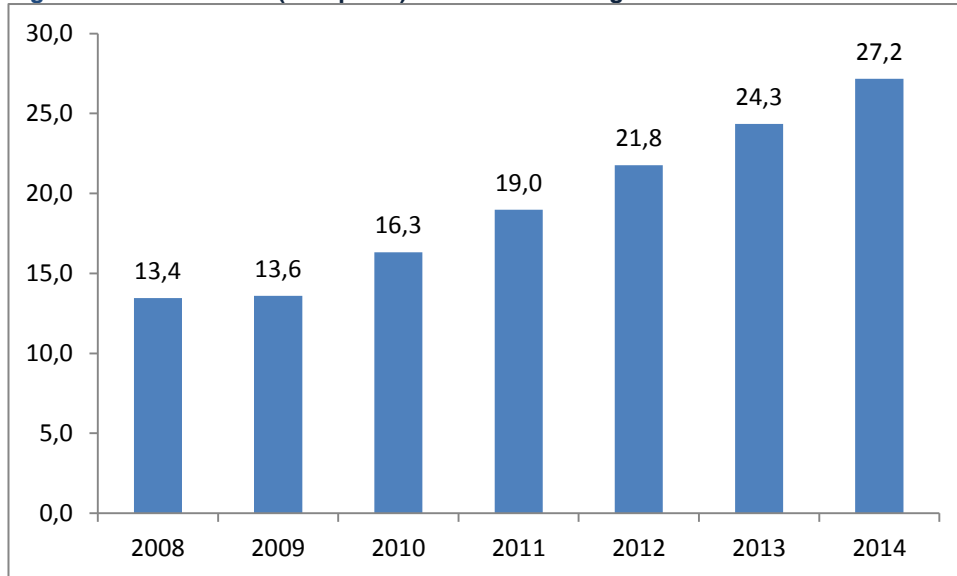
2.2 A €27.2 billion market in the EU

- The total size of the online advertising market in the EU in 2014 was €27.2 billion, an increase of 11.6% compared to the total of €24.3 billion in 2013.
- Based on WARC figures, the compound annual growth rate of Internet advertising in the EU over the 2008-2013 period is 12.4%.

¹ <http://www.iabeurope.eu/>

² <http://www.warc.com/>

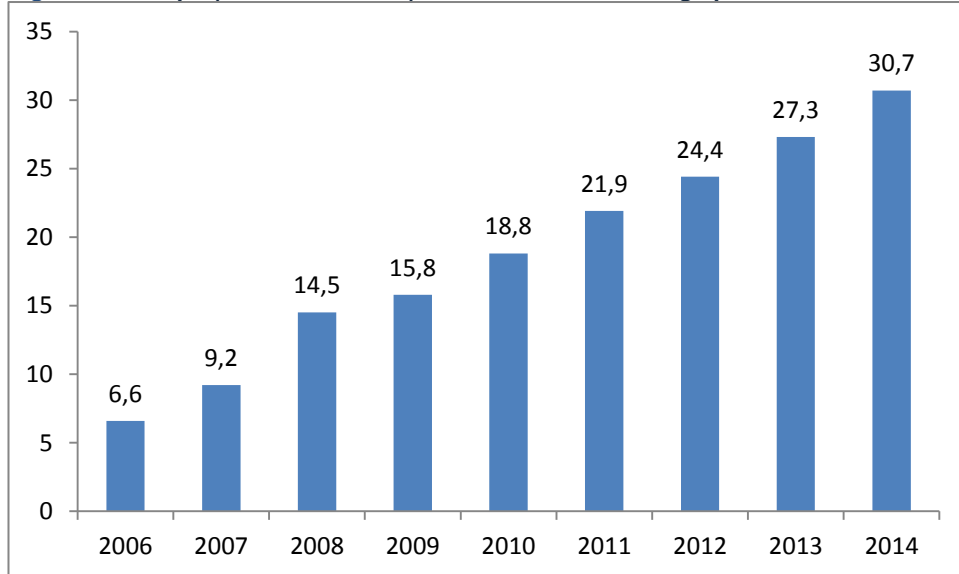
Figure 1 EU countries (except LU) Online advertising 2008 – 2014 in EUR billion



© Warc (www.warc.com), 2015. Please refer to notes on ad spend data for further detail and source information.
<http://www.warc.com/NotesOnAdspendData>

- The total size of the European online advertising market in 2014 (**26 IAB European countries**) was €30.7 billion, an increase of 12% compared to the total of €27.4 billion in 2013.
- IHS calculates a compound annual growth rate of +21.6% for online advertising in Europe since 2006. However, only 2012, 2013 and 2014 data come from IAB Europe, and data for 2006 to 2011 are estimated by IHS. Therefore, the sources of figures mean caution is advised when interpreting these figures.
- This growth can be attributed on the one hand to the rise in online media consumption in European countries, with people consuming more media content (video, newspapers, social networks) online and on mobile devices, and on the other hand to the sophistication of advertising solutions (including more efficient targeting).

Figure 2 Europe (26 IAB countries) Total online advertising spend 2006 -2014 - in EUR billion

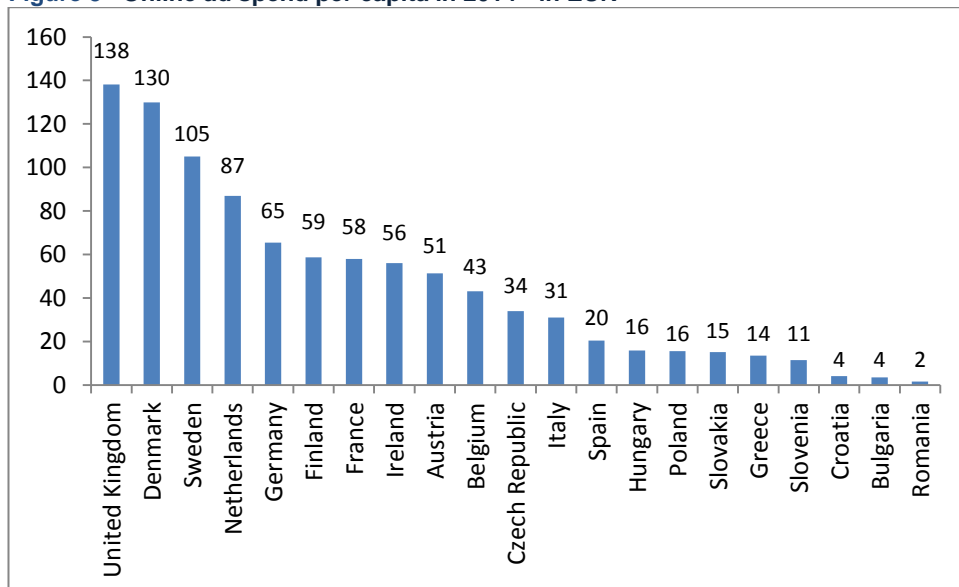


Source: IAB Europe Adex Benchmark 2014/HIS

2.3 Strong variation of online ad spend per capita

- The online ad spend per capita shows the “relative” worth of a customer to advertisers and is also an indicator of the maturity of the online market (the higher the online ad spend per capita, the more mature the market) in each country. Online ad spend per capita ranges from €138 in the UK to €2 in Romania.

Figure 3 Online ad spend per capita in 2014 - in EUR



Source: IAB Europe Adex Benchmark 2014/IHS

2.4 The top 3 countries in the EU account for 65 % of total ad spend

- The top three countries for online ad spend in the European Union in 2014 were the United Kingdom, with overall online ad spend of €8.9 billion, Germany, with €5.1 billion and France, with €3.7 billion. These three countries accounted for 65.4% of online advertising in Europe.
- The “Top 10” countries by online ad spend in the European Union are all in Western Europe, with the exception of Poland.

Table 1 Internet Advertising in EU countries 2008 - 2013 in EUR million

	2008	2009	2010	2011	2012	2013	2014
Austria	202	228	266	301	326	378	434
Belgium	286	293	332	360	464	478	492
Bulgaria	n.a.	5	7	20	26	25	26
Croatia	16	17	21	15	14	15	14
Cyprus	1	1	1	2	3	2	2
Czech Republic	115	150	243	237	310	352	353
Denmark	415	384	454	524	589	628	629
Estonia	8	6	10	11	12	13	15
France	1821	1760	2103	2606	3343	3494	3725
Finland	178	208	235	254	255	272	291
Germany	2975	3092	3568	4179	4253	4676	5111
Greece	40	69	84	100	94	129	121
Hungary	89	84	99	112	117	136	160
Ireland	20	97	116	131	155	197	198
Italy	799	850	1084	1298	1503	1703	1908
Latvia	12	9	8	10	11	10	11
Lithuania	9	6	7	8	10	11	13
Malta	1	1	1	1	1	2	3
Netherlands	794	815	1065	1117	1199	1312	1461
Poland	255	320	357	446	495	549	550
Portugal	n.a.	n.a.	n.a.	n.a.	n.a.	617	723
Romania	n.a.	19	21	21	30	33	n.a.
Slovak Republic	n.a.	n.a.	34	48	56	66	76
Slovenia	20	21	24	17	18	19	23
Spain	628	667	817	926	911	901	946
Sweden	557	517	596	687	860	955	956
United Kingdom	4209	3974	4774	5557	6716	7371	8923
Total EU	13449	13590	16326	18986	21768	24345	27165

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<http://www.warc.com/NotesOnAdspendData>

Table 2 Concentration of online Ad spend in the EU - 2014 in EUR billion

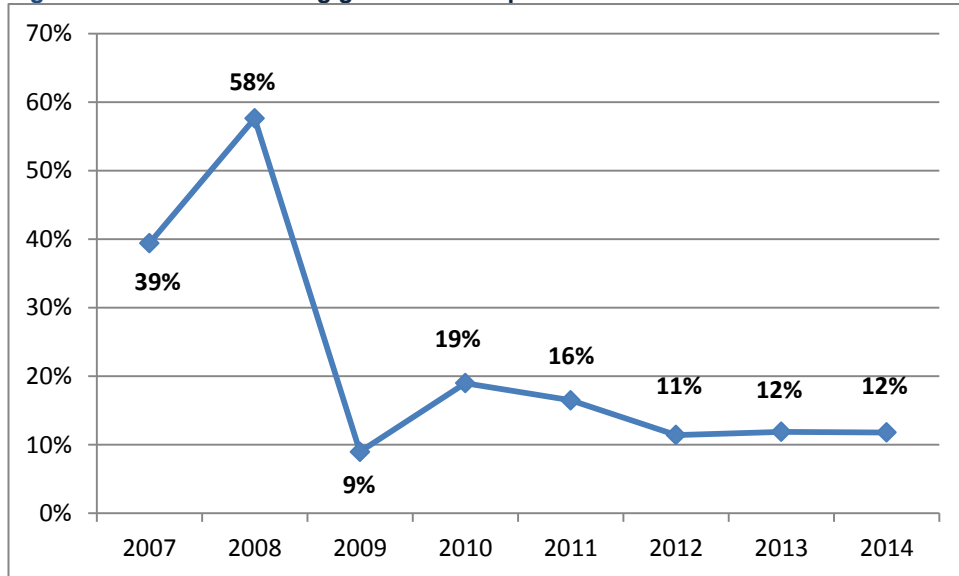
	2014	% of total EU 21	Accumulated %
United Kingdom	8923	32,8%	32,8%
Germany	5111	18,8%	51,7%
France	3725	13,7%	65,4%
Italy	1908	7,0%	72,4%
Netherlands	1461	5,4%	77,8%
Sweden	956	3,5%	81,3%
Spain	946	3,5%	84,8%
Portugal	723	2,7%	87,4%
Denmark	629	2,3%	89,8%
Poland	550	2,0%	91,8%
Belgium	492	1,8%	93,6%
Austria	434	1,6%	95,2%
Czech Republic	353	1,3%	96,5%
Finland	291	1,1%	97,6%
Ireland	198	0,7%	98,3%
Hungary	160	0,6%	98,9%
Greece	121	0,4%	99,3%
Slovak Republic	76	0,3%	99,6%
Romania	n.a.	n.a.	99,6%
Bulgaria	26	0,1%	99,7%
Slovenia	23	0,1%	99,8%
Estonia	15	0,1%	99,8%
Croatia	14	0,1%	99,9%
Lithuania	13	0,0%	99,9%
Latvia	11	0,0%	100,0%
Malta	3	0,0%	100,0%
Cyprus	2	0,0%	100,0%
Total EU	27165	100,0%	100,0%

© Warc (www.warc.com), 2015. Please refer to notes on ad spend data for further detail and source information.
<http://www.warc.com/NotesOnAdspendData>

2.5 The market is maturing as growth rates stabilize

- The 2009 crisis severely impacted Internet advertising as the annual growth rate decreased from 59% in 2012 to 9% in 2009.
- Excepting this 2009 downturn, growth rates tend to decrease gradually and stabilize around 12% per year, but still exceeds by a big margin GDP growth in Europe and ad spend on other media. Online ad spend seems to be more “resilient against economic volatility”, as IAB puts it, but is still affected by the general economic climate.

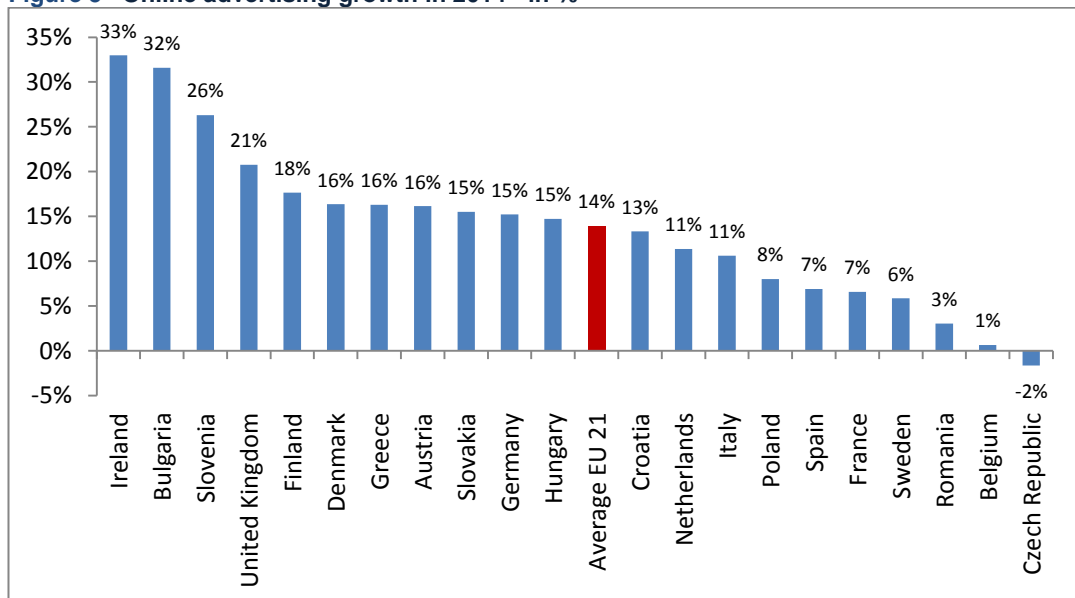
Figure 4 Online advertising growth in Europe 2007-2014 - in %



Source: IAB Europe Adex Benchmark 2014/HIS

- Growth rates in 2014 showed a significant dispersion, ranging from -2% in Czech Republic to 33% in Ireland. Countries with the highest growth rates are originated both from Western and from Central and Eastern Europe.

Figure 5 Online advertising growth in 2014 - in %

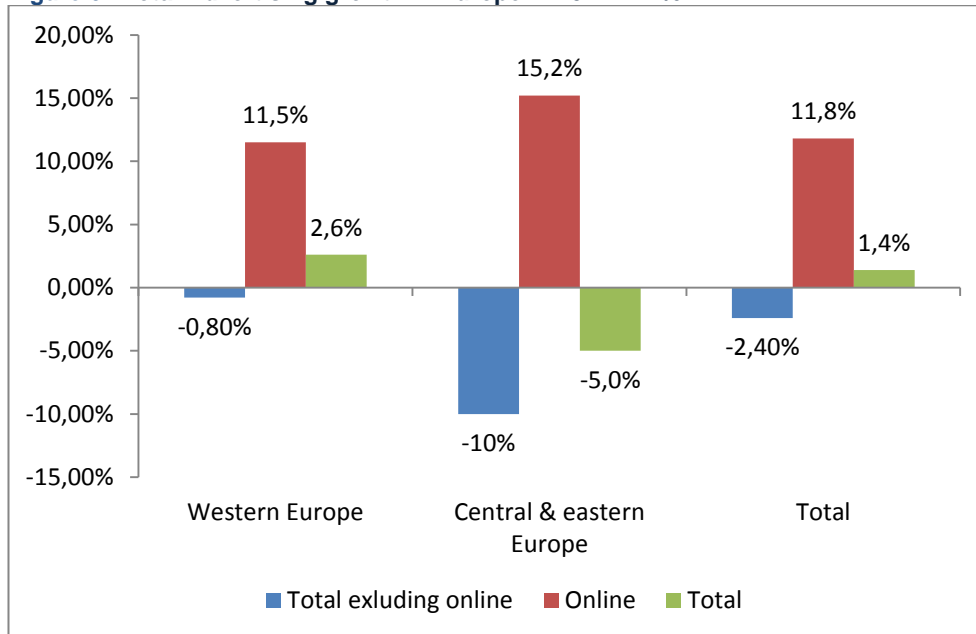


Source: IAB Europe Adex Benchmark 2014/IHS

2.6 Online share of total advertising is growing

- IAB provides a general overview of the growth of the total advertising market (online and all other media) in Europe. From this analysis, it appears that online advertising is mitigating the decline in advertising spending in Western Europe and Central and Eastern Europe.
- Advertising is a sector which is closely correlated to the general macroeconomic state of national economies. Europe has since 2008 been in a state of slow economic recovery following the financial crisis, and advertising spending has not been excluded from this general slowdown of European economies. The data provided by IAB and IHS point, however, to the stronger resistance of the online advertising sector compared to the other advertising sectors.
- Considering Western Europe, the total advertising market experienced a 2.6% growth in 2014, but it would have decreased if online (which grew by 11.5% in Western Europe in 2014) were not included. The impact of the online advertising spend on the total ad market was also significant in Central and Eastern Europe (remember that Russia and Turkey are included in these figures), where the overall ad market decreased by 5% in 2014. If online ad spend had been excluded, the CEE ad market would have shrunk by 10%. Overall, the European advertising market modestly grew of 1.4% in 2014. Without online, it would have decreased by -2.4%.

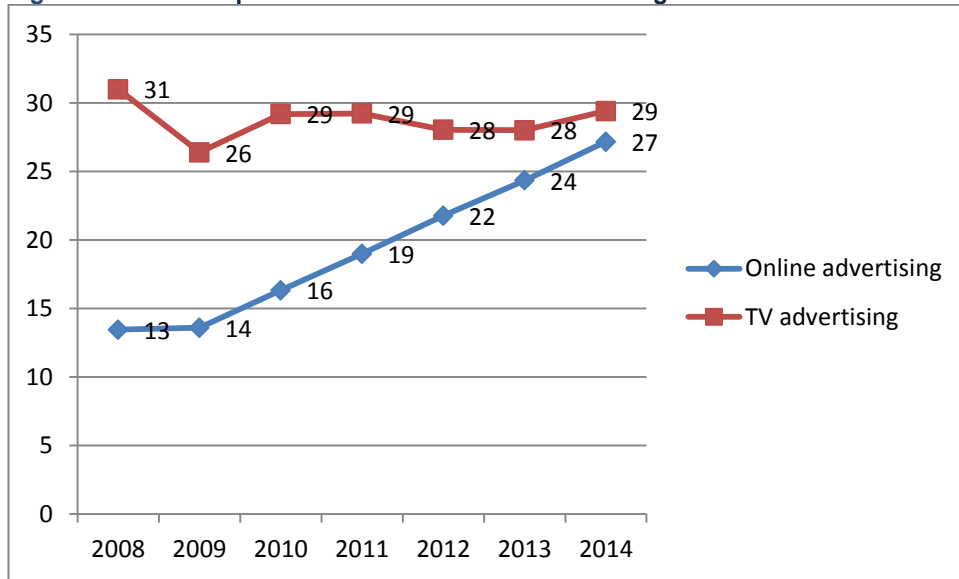
Figure 6 Total Advertising growth in Europe in 2014 - in %



Source: IAB Europe Adex Benchmark 2014/IHS

- Since at least 2009 the growth rate of Internet advertising has been systematically higher than the growth rate of TV advertising.

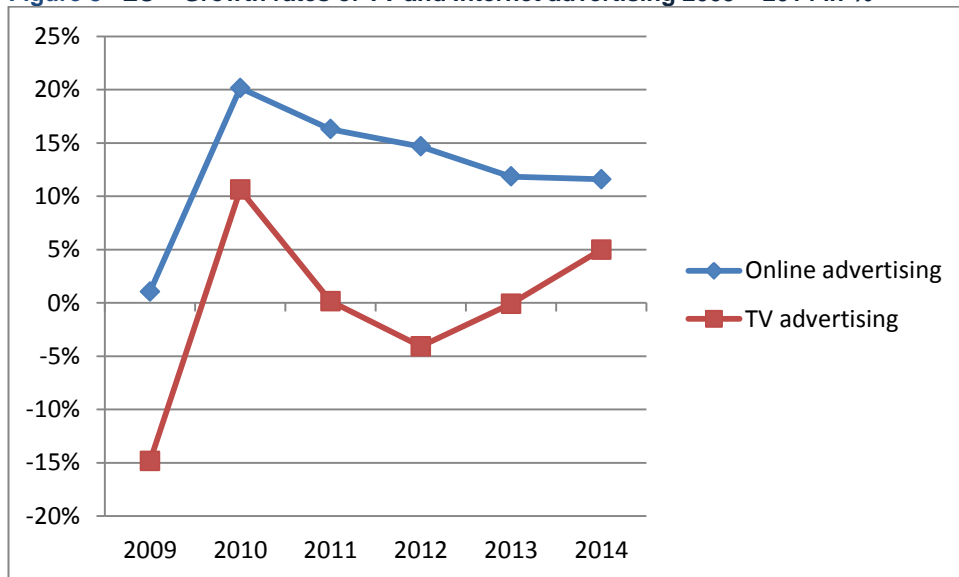
Figure 7 EU – Comparison of TV and Internet advertising - 2008 – 2014 in EUR billion



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<http://www.warc.com/NotesOnAdspendData>.

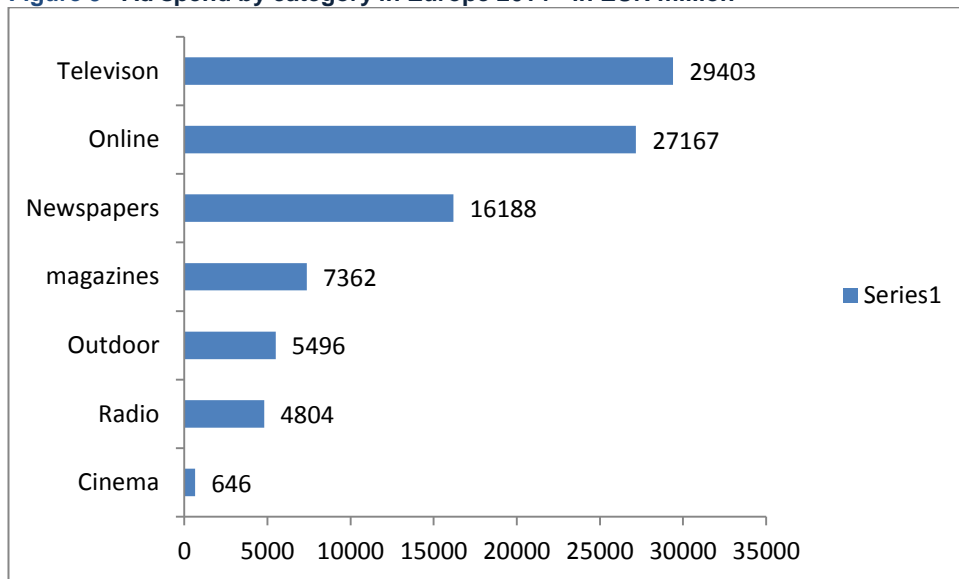
Figure 8 EU – Growth rates of TV and Internet advertising 2009 – 2014 in %



© Warc (www.warc.com), 2014. Please refer to notes on ad spend data for further detail and source information.

- Online has therefore become the second medium in Europe for ad spend, just behind TV advertising.

Figure 9 Ad spend by category in Europe 2014 - in EUR million

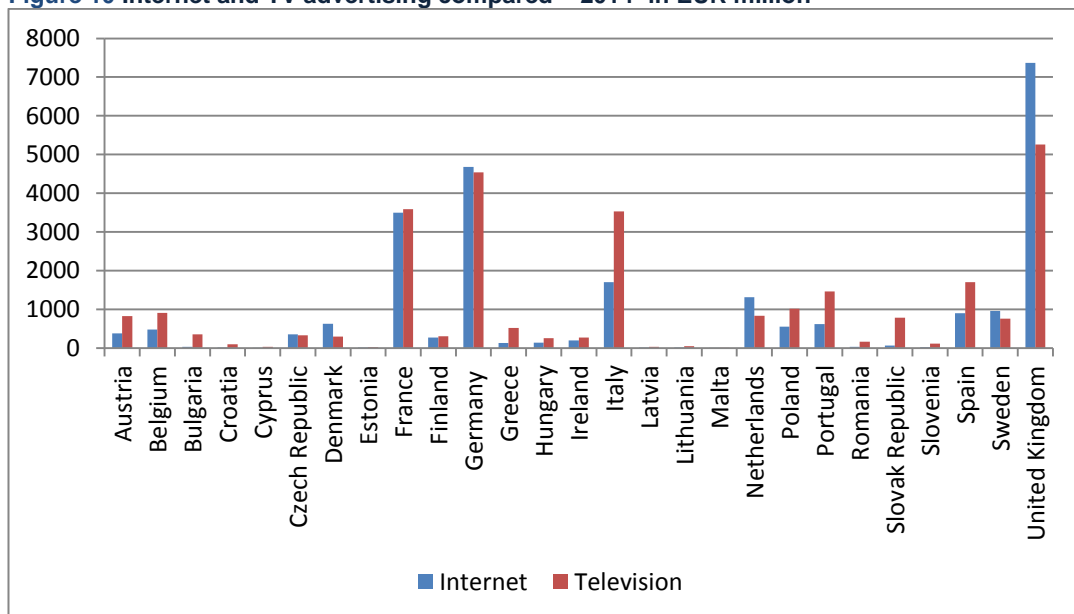


© Warc (www.warc.com), 2015. Please refer to notes on ad spend data for further detail and source information

<http://www.warc.com/NotesOnAdspendData>

- In 2014, Internet advertising was higher than TV advertising in Czech Republic, Denmark, Germany, The Netherlands, Sweden and United Kingdom.

Figure 10 Internet and TV advertising compared – 2014- in EUR million



© Warc (www.warc.com), 2014. Please refer to notes on ad spend data for further detail and source information.

<http://www.warc.com/NotesOnAdspendData>

2.7 Analysis of advertising formats

2.7.1 Three main formats of online advertising

- IAB Europe (and also USA) divides the online advertising into three major categories:
 - Paid-for-Search advertising:³ “Fees advertisers pay Internet companies to list and/or link their company site or domain name to a specific search word or phrase (includes paid search revenues).” As this form of advertising often happens before the person searching makes a purchase, this is the form of advertising most valued by advertisers (e.g. user searching for a hotel, plane ticket, product, etc.)
 - Classified advertising and directories:⁴ “A form of advertising which is particularly common in newspapers, online and other periodicals which may be sold or distributed free of charge. Classified advertising is called such because it is generally grouped under headings classifying the product or service being offered (headings such as Accounting, Automobiles, Clothing...) and is grouped entirely in a distinct section, which makes it distinct from display advertising. Display advertising typically contains graphics or other art work and which is more typically distributed throughout a publication adjacent to editorial content.”
 - Display advertising: “a form of online advertising where an advertiser’s message is shown on a destination web page, generally set off in a box at the top or bottom or to one side of the content of the page” (examples include banner ads, online video ads, pop-ups, etc.)

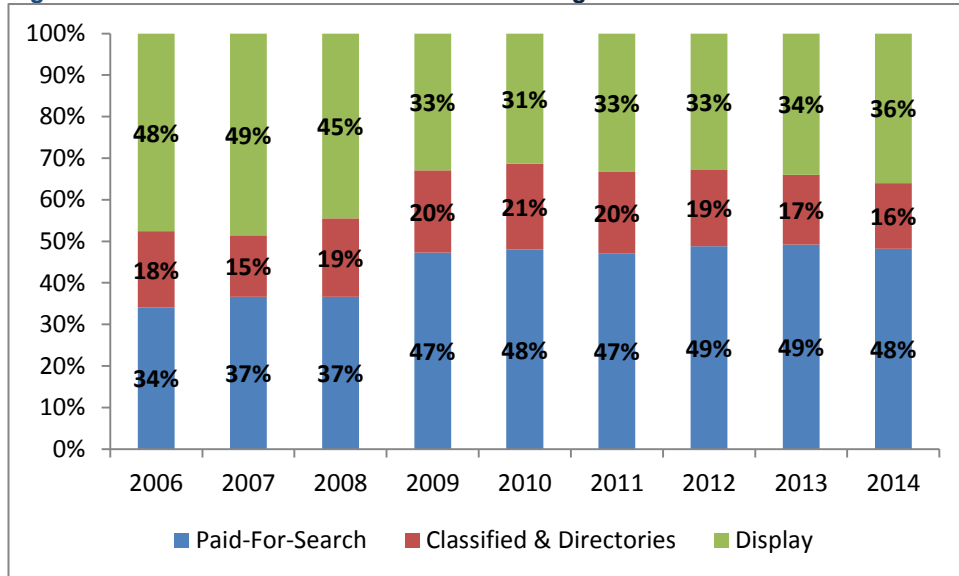
2.7.2 Display advertising second ad format in Europe in 2014

- Between 2006 and 2014, paid-for-search advertising increased its overall importance, rising from 34% of the online ad spend in 2006 to 48% in 2014. On the other hand, display advertising declined from 48% to 36%.

³ IAB, “Glossary of Interactive Advertising Terms v. 2.0”, available at: www.iab.net/media/file/GlossaryofInteractivAdvertisingTerms.pdf

⁴ IAB UK, “Jargon buster”, available at: www.iabuk.net/resources/jargon-buster

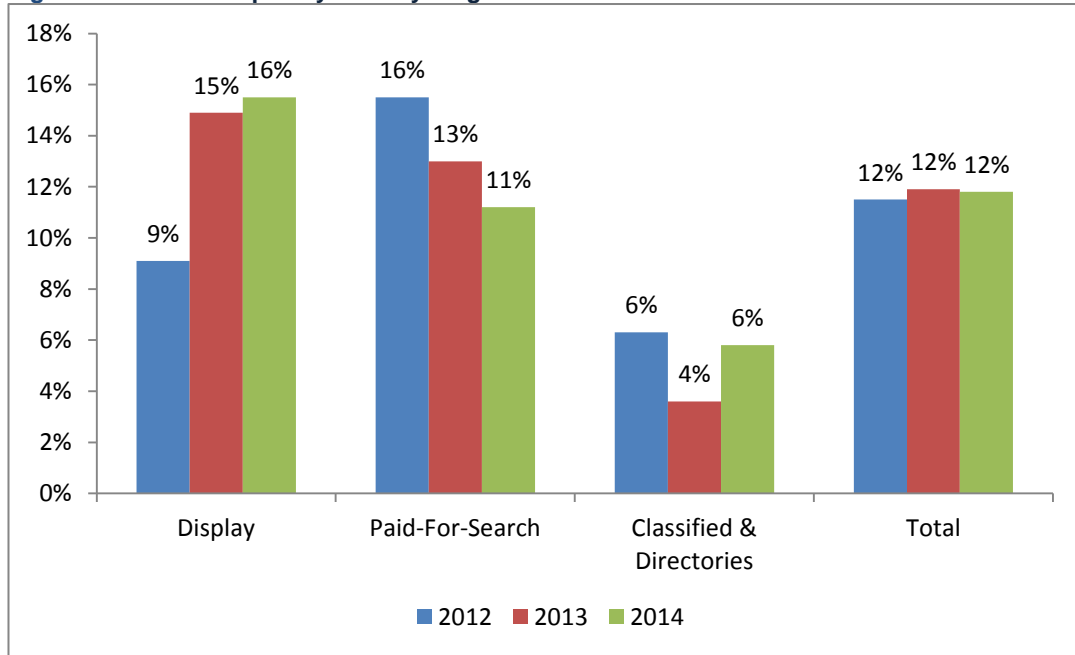
Figure 11 Format shares of total online advertising 2006-2014 - in %



Source: IAB Europe Adex Benchmark 2014/IHS

- However, since 2011, display is regaining market shares, mostly at the expenses of classified and directories. New formats and advertising techniques (such as online video, mobile ads, social network ads/real-time bidding and marketing, programmatic advertising based on algorithms and the use of “big data”) have exposed display advertising to the renewed interest of advertisers. Better targeting capability through the use of “big data” collected on web users, automatic ad buying and the fact that more “eyeballs” (consumers) are operating in the online space, combined with new and more immersive ad formats (online video) or location-based advertising, are clearly an incentive for the wider use of display advertising on the Internet. Also, the increase in the use of mobile devices is opening up an era of mobile advertising, with different constraints than “classical” desktop advertisements.

Figure 12 Online ad spend year-on-year growth - in %

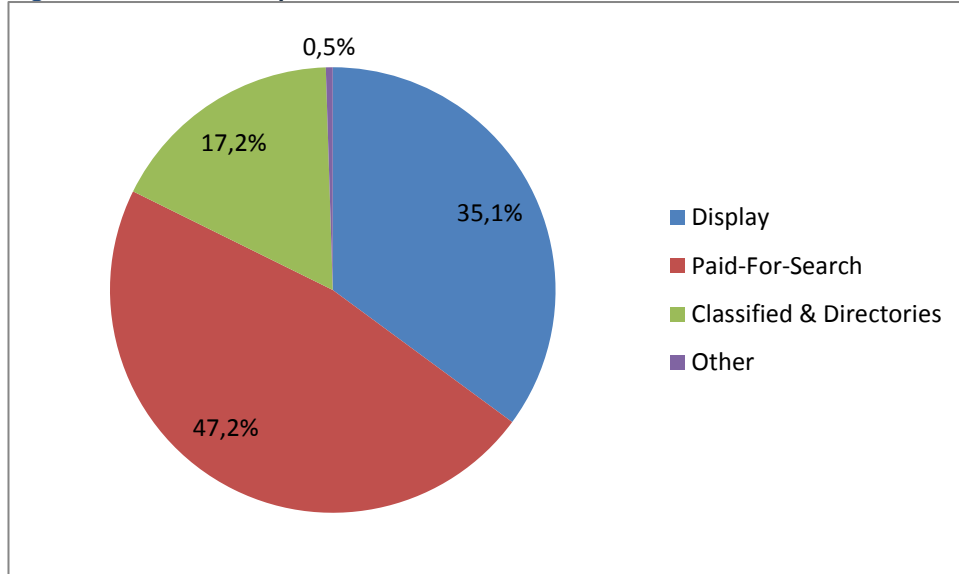


Source: IAB Europe Adex Benchmark 2014/HIS

2.7.3 Differences between Western Europe and CEE in share of online ad formats

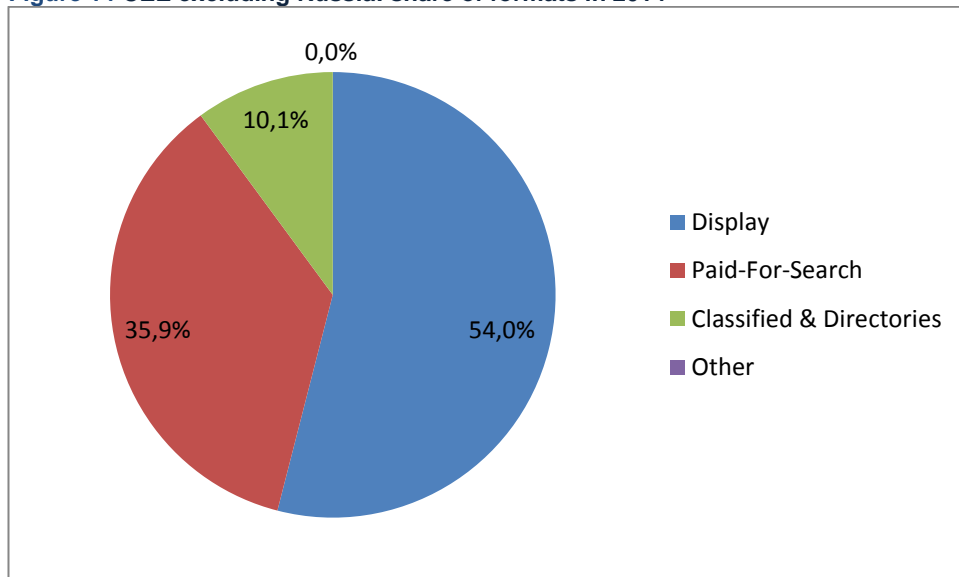
- IAB provides a geographical breakdown of formats in Europe. Whereas the use of paid-for-search is dominant in Western Europe (47.2% of online advertising), display advertising is more common in Central and Eastern European countries (54.0% of all formats). This could be explained by the higher incomes in Western Europe than in Central and Eastern Europe: Paid-for-search is more valuable for companies in Western Europe as the average Internet user is more likely to make a purchase after a search, whereas in CEE countries the purpose of online advertisements is more to achieve branding objectives than converting searches into purchases.

Figure 13 Western Europe: share of formats in 2014



Source: IAB Europe Adex Benchmark 2014/IHS

Figure 14 CEE excluding Russia: share of formats in 2014



Source: IAB Europe Adex Benchmark 2014/IHS

2.7.4 The dynamics of display

- The data made available by IAB and IHS shows that in the 21 EU countries observed the total value of display advertising in 2014 was 9.7€ billion, growing by +22% compared to 2013. The UK (2.8€ billion), Germany (1.7€ billion) and France (1.1€ billion) are topping the ranking but with different growth rate for each country; the UK (29%) and Germany (30%) have ex-

perienced a strong growth in display ad spend in 2014, whereas France (13%) grew under the EU average.

Table 3 Display value and growth by country 2012-2014 in EUR million

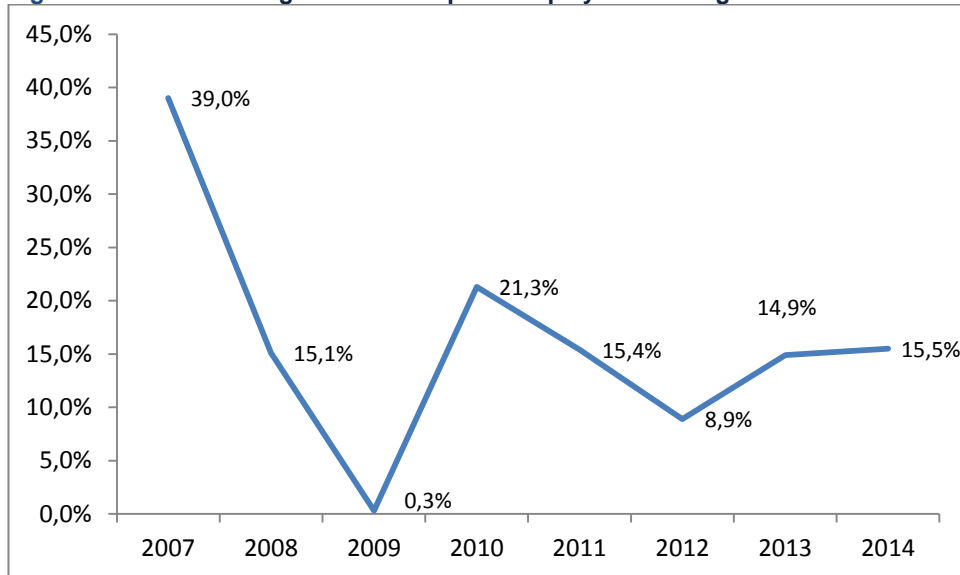
	2012	2013	2014	Growth 2014/2013
United Kingdom	1 741	2 192	2 818	29%
Germany	1 207	1 319	1 715	30%
France	965	1 015	1 146	13%
Italy	693	866	1048	21%
Netherlands	528	577	646	12%
Spain	362	342	349	2%
Sweden	294	330	388	18%
Poland	228	259	278	7%
Czech Republic	188	223	213	-4%
Denmark	204	209	272	30%
Austria	124	159	196	23%
Finland	123	139	178	28%
Belgium	106	111	168	51%
Ireland	58	74	98	32%
Hungary	58	61	68	11%
Greece	59	59	65	10%
Romania	28	33	33	0%
Slovakia	25	27	51	89%
Bulgaria	13	13	18	38%
Slovenia	11	11	12	9%
Croatia	7	7	8	14%
Total EU 21	7 021	8 026	9 768	22%

Source: IAB Europe Adex Benchmark 2014/IHS

- We could not extract the data for year-on-year growth in EU countries for online display ad spend expenditures therefore we have to rely on the Europe aggregated data provided by IAB for the years 2007 to 2014. Display ad spend, without the major fall in 2009 in the economic crises, grew at strong levels (39% in 2007) but seems to stabilize the last 4 years around 10% to 15%.
- The rise of video viewing on sites such as YouTube or Facebook combined with more online display ad formats and experimentation with different forms of online video are strong drivers for the investments in display. The increased success of Multichannel Networks on YouTube, which are acting as huge content aggregator and for which the dominant one's can generate

billions of video views per months for their multiple channels, the establishment of YouTube channels of traditional media companies as a way to get in touch with younger audiences will further offer growth opportunities for advertisers and for the development of the online display advertisement market in Europe.

Figure 15 Year-on-Year growth in European Display advertising 2007-2014- in %



Source: IAB Europe Adex Benchmark 2014/IHS

2.8 The key players

Very few data are available on market shares of the online advertising market, and none at the European level. The following section builds from eMarketer worldwide estimates.

- Google earns approximately 30% of the worldwide online advertising market.
- Google leading position directly derives from the Paid-for-Search segment of online advertising. But YouTube, a Google service, also benefits from the increasing share of video advertising within the display segment.
- Facebook is experiencing a rapid growth of its market share, benefitting both from its strong position on mobile and from the introduction of video on its pages.
- Other well-known Internet brands such as Twitter, Amazon or Twitter capture less than 1% each of the online advertising market.

Table 4 Net Digital Ad Revenue Share Worldwide, by company, 2012-2014

	2012	2013	2014 (e)
Google	31.30%	31.92%	31.45%
Facebook	4.09%	5.82%	7.79%
Microsoft	2.44%	2.45%	2.54%
Yahoo!	3.36%	2.86%	2.52%
IAC	1.34%	1.27%	1.04%
AOL	1,02%	0.94%	0.88%
Twitter	0.26%	0,50%	0.79%
Amazon	0.53%	0.63%	0.75%
LinkedIn	0.37%	0.47%	0.54%
Pandora	0.34%	0.43%	0.52%
Yelp	0.12%	0.18%	0.25%
Millennial Media	0,07%	0.09%	0.09%
Other	54.76%%	52.44%	50.82%
Total digital (\$ billions)	104.57	120.05	140.15

Source: eMarketer

Note: includes advertising that appears on desktop and laptop computers as well as mobile phones and tablets, and includes all the various formats of advertising on those platforms. Net ad revenues after companies pay traffic acquisition costs (TAC) to partner sites. Numbers may not add up to 100% due to rounding

- The mobile advertising market appears to be more concentrated than the legacy “fixed” online advertising market, as Google and Facebook together account for two thirds of the worldwide revenues.

- eMarketer estimated that, in 2014, mobile would account for 63% of Facebook advertising revenues, to be compared with 33% for Google.

Table 5 Net Mobile Internet Ad Revenue Share Worldwide, by Company, 2012-2014, % of total

	2012	2013	2014 (e)
Google	52,6%	49,3%	46,8%
Facebook	5,4%	17,5%	21,7%
Twitter	1,5%	2,4%	2,6%
Pandora	2,6%	2,1%	1,7%
YP	2,9%	2,1%	1,6%
Millennial Media	0,8%	0,8%	0,7%
Other	34,2%	25,8%	24,9%
Total mobile ad revenues (billions)	\$8,76	\$17,96	\$31,45

Source: eMarketer, March 2014

Note: net ad revenues after companies pay traffic acquisition costs (TAC) to partner sites; includes display (banners and other, rich media and video) and search. Ad spending on tablets is included. Excludes SMS, MMS and P2P messaging-based advertising.

3 Key trends

3.1 The dynamics of video advertising

Online video advertising as defined by IAB is in-stream video ads (pre-rolls, mid-rolls, post-rolls)⁵. Various other categories of video advertising exist (such as in-stream banner overlays, out-of-stream video advertising, and contextual video advertising) but those categories are not taken into account by IAB and HIS. Where figures were not provided as such IHS modelled the figure based on local market knowledge⁶.

The total video ad spend in the 18 EU countries where data is available totalled 1.47€ billion in 2014, up by 39%. The United Kingdom is by a distance the number one market for video advertising, already having a market value of €508 million.

Online video advertising represents in average 16% of display advertising in Europe.

Table 6 Video ad spend in EUR million

	2014	Growth 2014/2013	Share of display advertising
United Kingdom	508	42%	18%
Germany	234	28%	14%
France	179	29%	16%
Italy	117	18%	11%
Netherlands	106	30%	16%
Spain	72	143%	21%
Sweden	67	59%	17%
Poland	45	28%	16%
Belgium	39	17%	23%
Austria	22	115%	11%
Finland	16	n.a.	9%
Czech Republic	15	24%	7%
Denmark	15	60%	6%
Ireland	14	63%	14%
Greece	12	188%	18%
Slovenia	4	40%	33%
Hungary	4	148%	6%
Romania	1	0,562	3%
Total EU 18	1 470	39%	16%

Source: IAB Europe Adex Benchmark 2014/IHS

⁵ This definition was agreed on by the IAB Europe Video Working Group

⁶ We do not have any more details on the model used and the local market knowledge applied by IHS.

IHS estimates that online video advertising market will increase by more than 75% between 2015 and 2018, and that Google and Facebook will together gain 50% of the market in 2018.

Figure 16 Online video advertising revenue in Europe, 2006-2018 in USD million



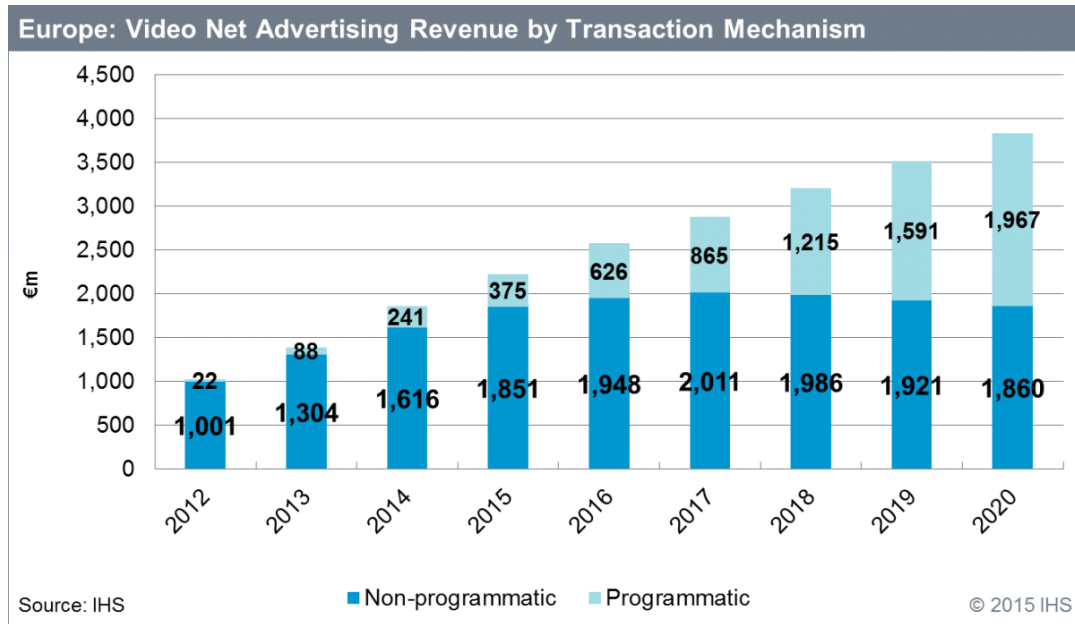
Source: IHS

3.2 The rise of programmatic video advertising

3.2.1 Programmatic advertising expands to video advertising

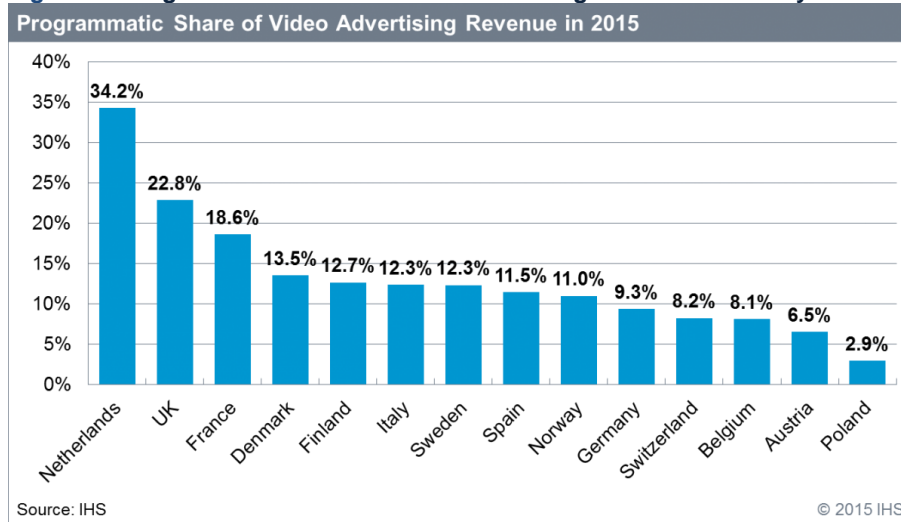
One of the key drivers of the growth of video advertising is the extension to video ads of **programmatic video advertising**, i.e. the automated placement of ads using algorithms, which facilitates the purchase and sell of advertising inventory. The share of programmatic solutions within video advertising is growing rapidly: in 2012 programmatic represented only 2.2% of net video advertising revenues in Europe (of a total of EUR 1.02 billion generated by online video advertising). In 2015, this share has already passed to 16.8% of the total revenues generated by video, EUR 2.2 billion. In 2020, it will represent more than half (51.4%) of online video revenues generated in Europe, which will amount to EUR 3.82 billion.

Figure 17 Video Net Advertising Revenue by Transaction Mechanism, Europe 2012-2020, in EUR million



Huge differences appear for the use of programmatic sales mechanism between countries in Europe. The Netherlands are the country in Europe which is most in advance in the use of programmatic sales mechanism, generating already 34.2% of video revenues through the use of programmatic mechanisms in 2015. On the other end of the spectrum, Austria with only 6.5% and Poland with 2.9% are under the Europe average.

Figure 18 Programmatic share of video advertising revenue in 2015 by EU country, in %



3.2.2 Media groups invest in programmatic platforms

As television⁷ is also starting to embrace the use of algorithms for the transactions used in selling video inventory (even if programmatic advertising lacks understanding by marketers⁸), Media groups invest in advanced advertising platforms:

- RTL group opened the movement of acquisitions, by acquiring a 65% stake in exchange for EUR 107 million in the programmatic advertising platform SpotXchange in 2014, being the first European broadcaster to buy an ad exchange⁹.

The reasons given by RTL co-CEO Guillaume de Posch at the time summarize well the reasons for the acquisition (quoted by the Financial Times¹⁰) and the risks European broadcasters are exposed to, becoming merely publishers in the online space but being excluded from the process of selling advertising, their core business in the traditional TV ecosystem: *“Long term, we have the risk of being disintermediated” from the process of selling online video ads* *“We fully understand how to sell commercial spots on TV. But in online video, the world is much more atomised.”* *“We want to be present in the value chain, not only as a pure publisher [of online videos], but also as a seller of advertising”.*

- RTL Group also led an investment round in programmatic advertising technology firm Clypd in April 2015, investing USD 19.4 million¹¹.
- German media group ProSiebenSat.1 acquired majority stakes in July 2015 in the advertising exchange platform Smartstream.tv¹² and in the programmatic ad specialist Virtual Minds¹³.
- Swedish media group Modern Times Group has launched its own programmatic trading platform VideoRange in 2015, in order to cover its automated video sales in Sweden, Norway, Denmark, the Baltics, Bulgaria and the Czech Republic¹⁴. Also, MTG partnered with technology provider

⁷ See, “AOL Says Its Programmatic Ad Platform Is Shaking Up Australian TV Market”, The Wall Street Journal, 15 June 2015, available at: <http://blogs.wsj.com/cmo/2015/06/15/aol-says-its-programmatic-ad-platform-is-shaking-up-australian-tv-market/>

See, “AMC Begins Selling TV Spots Programmatically, Higher Yields Expected”, Mediapost 16th September 2015, available at: <http://www.mediapost.com/publications/article/258417/amc-nets-begins-selling-tv-spots-programmatically.html>

See, “Will Programmatic Advertising Take Over TV? - Point, counter-point by Adweek expert”, Adweek 24th June 2014, available at: <http://www.adweek.com/news/television/will-programmatic-advertising-take-over-tv-158482>

⁸ See, “Ignorance no obstacle to programmatic”, Warc 25th September, available at:

⁹ See, “RTL buys online video advertising group”, Financial Times 31st July 2015, available at: <http://www.ft.com/intl/cms/s/0/3947580e-189d-11e4-a51a-00144feabdc0.html#axzz3nCsmog4h>

¹⁰ idem

¹¹ See, “RTL leads US\$19.4m round in ad technology firm Clypd”, DigitalTV Europe 10th April 2015, available at: <http://www.digitaltveurope.net/350502/rtl-leads-us19-4m-round-in-ad-technology-firm-clypd/>

¹² See, “ProSiebenSat.1 acquires programmatic ad leader”, DigitalTV Europe 30th July 2015, available at: <http://www.digitaltveurope.net/404841/prosiebensat-1-acquires-programmatic-ad-leader/>

¹³ See, “ProSiebenSat.1 takes majority stake in programmatic ad specialist”, DigitalTV Europe 1st July 2015, available at: <http://www.digitaltveurope.net/391692/prosiebensat-1-takes-majority-stake-in-programmatic-ad-specialist/>

¹⁴ See, “MTG launches programmatic video ad platform”, DigitalTV Europe 28th April 2015, available at: <http://www.digitaltveurope.net/359192/mtg-launches-programmatic-video-ad-platform/>

FreeWheel to sell its ad inventory across the Nordics and central and Eastern Europe in 2014¹⁵.

3.3 Mobile: a new ecosystem for advertising

The world is increasingly getting mobile. The rapid rise of the mobile Internet, enabled by smart, mobile connected devices such as smartphones and tablets and mobile broadband coverage, is changing the way consumers allocate their attention. The worldwide population is using more and more mobile devices to interact with the world, distract themselves and consume content. Mobile is an ecosystem of its own, with different rules and technologies¹⁶ to which publishers and advertisers have to adapt. As analysing the mobile ecosystem in formation is not the aim of this section and would be too long, we will focus on stressing the main points relevant to online advertising and video advertising.

Ericsson's Mobility report June 2015¹⁷ shows that mobile video will grow by 55% annually until 2020 to represent over 60% of all mobile data traffic on a worldwide basis. Europe will see an increase in smartphones subscriptions, passing from 450 million in 2014 to 830 million in 2020¹⁸ and seeing an explosion in data traffic per smartphone from 1.2 Gigabytes per month in 2014 to 6.5 Gigabytes per month in 2020 – 60% of which will eventually be video.

The forecasts by Ericsson go in line with projections on mobile ad spend established by eMarketer¹⁹. According to the research firm, worldwide mobile Internet ad spend will grow from USD 68.69 billion in 2015 to USD 101.37 billion in 2016 (a growth by 47.6% in just one year) to finally reach USD 195.55 billion in 2019. The importance of mobile advertising is further stressed by the fact that mobile advertising will already represent more than 50% of worldwide digital ad expenditures in 2016. Mobile advertising revenue in Europe was worth EUR 3.99 billion (+58.6% year-to-year) in 2014, according to IAB Europe²⁰.

¹⁵ See, "MTG teams up with FreeWheel", DigitalTV Europe 8th October 2014, available at:

<http://www.digitaltveurope.net/255671/mtg-teams-up-with-freewheel/>

¹⁶ See, "Mobile is a 'new ecosystem'", Warc 4th September 2015, available at:

<http://www.ericsson.com/res/docs/2015/ericsson-mobility-report-june-2015-reur-appendices.pdf>
[http://www.warc.com/Content/News/N35338/Mobile is a new ecosystem.content?PUB=Warc%20News&CID=N35338&ID=2105fdec-4ee5-4aa7-b67d-a2fc317d25b9&q=&qr=](http://www.warc.com/Content/News/N35338/Mobile%20is%20a%20new%20ecosystem.content?PUB=Warc%20News&CID=N35338&ID=2105fdec-4ee5-4aa7-b67d-a2fc317d25b9&q=&qr=)

¹⁷ See, "Ericsson Mobility Report: 70 percent of world's population using smartphones by 2020", Ericsson 3rd June 2015, available at: <http://www.ericsson.com/news/1925907>

¹⁸ See, "Ericsson Mobility Report – Appendix Europe", Ericsson 3rd June 2020, available at:

¹⁹ See, "Mobile Ad Spend to Top \$100 Billion Worldwide in 2016, 51% of Digital Market", eMarketer 2nd April 2015, available at: <http://www.emarketer.com/Article/Mobile-Ad-Spend-Top-100-Billion-Worldwide-2016-51-of-Digital-Market/1012299>

²⁰ See, "Global Mobile Advertising Revenue Hit \$31.9 Billion (€23.9 Billion) in 2014, According to IAB, IAB Europe & HIS", IAB 13th August 2015, available at: http://www.iab.net/about_the_iab/recent_press_releases/press_release_archive/press_release/pr-081315

Table 7 Mobile Internet Ad Spending Worldwide, 2013-2019

Mobile Internet Ad Spending Worldwide, 2013-2019

	2013	2014	2015	2016	2017	2018	2019
Mobile internet ad spending (billions)	\$19.20	\$42.63	\$68.69	\$101.37	\$133.74	\$166.63	\$195.55
—% change	117.9%	122.1%	61.1%	47.6%	31.9%	24.6%	17.4%
—% of digital ad spending	16.0%	29.4%	40.2%	51.1%	59.4%	65.9%	70.1%
—% of total media ad spending	3.7%	7.8%	11.9%	16.5%	20.5%	24.1%	26.8%

Note: includes display (banners, video and rich media) and search; excludes SMS, MMS and P2P messaging-based advertising; ad spending on tablets is included

Source: eMarketer, March 2015

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Table 8 Mobile Internet Ad Spending Worldwide, by Country, 2013-2018

Mobile Internet Ad Spending Worldwide, by Country, 2013-2018

millions

	2013	2014	2015	2016	2017	2018
US	\$10,422	\$18,911	\$28,477	\$40,241	\$49,560	\$57,543
China*	\$920	\$7,537	\$13,977	\$22,140	\$31,306	\$40,604
UK**	\$1,949	\$3,703	\$5,369	\$7,248	\$9,133	\$11,142
Japan	\$1,835	\$2,752	\$3,853	\$5,009	\$6,311	\$7,573
Germany	\$451	\$1,309	\$2,095	\$3,065	\$4,198	\$5,248
South Korea	\$455	\$1,000	\$1,600	\$2,080	\$2,496	\$2,946
Canada	\$392	\$854	\$1,416	\$2,200	\$2,862	\$3,666
Australia	\$341	\$852	\$1,364	\$2,114	\$2,959	\$3,847
France	\$248	\$446	\$714	\$1,035	\$1,450	\$1,971
Netherlands	\$162	\$454	\$680	\$953	\$1,238	\$1,548
Italy	\$205	\$369	\$553	\$775	\$1,046	\$1,360
Brazil	\$66	\$249	\$549	\$1,015	\$1,726	\$2,675
Norway	\$106	\$317	\$475	\$641	\$821	\$1,002
Sweden	\$140	\$293	\$440	\$594	\$772	\$927
Russia	\$65	\$196	\$431	\$776	\$1,087	\$1,413
Denmark	\$108	\$269	\$391	\$508	\$635	\$762
Mexico	\$104	\$214	\$388	\$605	\$910	\$1,306
Spain	\$53	\$101	\$176	\$300	\$494	\$781
India	\$26	\$79	\$173	\$347	\$589	\$943
Finland	\$41	\$102	\$153	\$199	\$249	\$298
Indonesia	\$12	\$43	\$129	\$323	\$743	\$1,487
Argentina	\$8	\$24	\$71	\$170	\$340	\$612

Worldwide* \$19,197 \$42,631 \$68,695 \$101,366 \$133,743 \$166,628**

Note: includes display (banners, video and rich media) and search; excludes SMS, MMS and P2P messaging-based advertising; includes ad spending on tablets; *excludes Hong Kong; **includes SMS, MMS and P2P messaging-based advertising; ***includes countries not listed

Source: eMarketer, March 2015

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Changing even more the traditional digital ecosystem, mobile content consumption is happening mostly in application. Whereas on the fixed Internet (desktop-based), display advertising was displayed on web pages, on the mobile Internet advertising is taking increasingly place in applications, the place where mobile users spend the most of their time. In the USA, mobile phone users are spending more time in apps than on TV²¹ - 168 minutes of daily average minutes are spent on TV

²¹ See, "U.S. Consumers Now Spend More Time In Apps Than Watching TV", TechCrunch 10th September 2015, available at: <http://techcrunch.com/2015/09/10/u-s-consumers-now-spend-more-time-in-apps-than-watching-tv/#.jxnocv:CbSh>

versus 198 minutes in mobile Apps as of the 2nd quarter 2015 according to Flurry²². Whereas the average time spend with TV has remained stable throughout the years 2013, 2014 and 2015 (at 168 minutes per day), time spent with mobile Apps has continuously risen from 126 minutes in 2013 to 198 minutes in 2015.

A recent study published by eMarketer on time spent with media by adults in the United Kingdom²³ shows the importance of digital media, in which mobile is set to take the lion share. UK Adults will spend on average 4:38 hours per day with digital media in 2015, 2:24 hours of which on mobile devices. The time spent on mobile devices is set to rise to 3:12 hours by 2017, mobile becoming the major media consumed before TV with 3:06 hours on average per day. Even if the eMarketer study does not give time spent in apps by UK users, from mobile usage in the US and worldwide data it can be inferred that most of this time is also spent in applications as opposed to time spent in a mobile browser.

Table 9 Average Time Spent per Day with Major Media by UK Adults, 2013-2017

Average Time Spent per Day with Major Media by UK Adults, 2013-2017

hrs:mins

	2013	2014	2015	2016	2017
Digital	3:29	4:08	4:38	5:07	5:31
Desktop/laptop*	2:07	2:11	2:14	2:17	2:19
Mobile (nonvoice)	1:22	1:57	2:24	2:50	3:12
—Smartphone	0:55	1:14	1:34	1:55	2:12
—Tablet	0:20	0:36	0:44	0:50	0:55
—Feature phone	0:07	0:07	0:06	0:06	0:05
TV**	3:14	3:12	3:10	3:08	3:06
Radio**	1:26	1:24	1:23	1:23	1:22
Print**	0:21	0:20	0:19	0:19	0:18
Total	8:30	9:04	9:31	9:56	10:16

Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of multitasking; for example, 1 hour of multitasking on desktop/laptop while watching TV is counted as 1 hour for TV and 1 hour for desktop/laptop; numbers may not add up to total due to rounding; *includes all internet activities on desktop and laptop computers; **excludes digital
Source: eMarketer, Sep 2015

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The time spent by UK consumers with their mobile devices goes in line with the increased spending in the UK mobile advertising market, which will reach GBP 3.2 billion in 2015 (+45%) and will overtake TV advertising in 2016²⁴ (forecasted mobile ad spend of GBP 4.4 billion in 2016 compared to TV ad spend of GBP 4.2 billion). Mobile, in digital advanced countries, is certainly a game changer.

²² See, “The Cable Industry Faces The Perfect Storm: Apps, App Stores and Apple”, Flurry Insights 10th September 2015, available at: <http://flurrymobile.tumblr.com/post/128773968605/the-cable-industry-faces-the-perfect-storm-apps>

²³ The United Kingdom is the country in Europe with the highest level of digital ad expenditures and is also one of the most advanced countries in digital media consumption as the revenues of its VoD markets show. Therefore, it is only an example which cannot be generalized to other EU countries. We stress this example in order to show a situation in which other EU countries might eventually find themselves, increased digital media consumption, increasingly on mobile devices and therefore an increase in overall digital and mobile ad spending.

²⁴ See, “Mobile Ad Spending to Overtake Print in the UK”, eMarketer 30th September 2015, available at: <http://www.emarketer.com/Article/Mobile-Ad-Spending-Overtake-Print-UK/1013043>

Table 10 UK Total Media Ad Spending by Media 2014-2019

UK Total Media Ad Spending, by Media, 2014-2019

millions of £, % of total and % change

	2014	2015	2016	2017	2018	2019
Total media ad spending						
Digital	£7,194	£8,057	£8,944	£9,749	£10,577	£11,318
—Mobile	£2,249	£3,261	£4,402	£5,546	£6,766	£7,781
TV	£3,919	£4,123	£4,267	£4,310	£4,353	£4,396
Print	£2,805	£2,672	£2,580	£2,536	£2,500	£2,470
—Newspapers*	£2,059	£1,960	£1,892	£1,861	£1,835	£1,813
—Magazines*	£746	£712	£688	£675	£665	£657
Outdoor	£1,019	£1,052	£1,081	£1,103	£1,123	£1,140
Radio**	£345	£354	£357	£358	£359	£360
Total	£15,282	£16,258	£17,229	£18,055	£18,912	£19,684
Total media ad spending share (% of total)						
Digital	47.1%	49.6%	51.9%	54.0%	55.9%	57.5%
—Mobile	14.7%	20.1%	25.5%	30.7%	35.8%	39.5%
TV	25.6%	25.4%	24.8%	23.9%	23.0%	22.3%
Print	18.4%	16.4%	15.0%	14.0%	13.2%	12.5%
—Newspapers*	13.5%	12.1%	11.0%	10.3%	9.7%	9.2%
—Magazines*	4.9%	4.4%	4.0%	3.7%	3.5%	3.3%
Outdoor	6.7%	6.5%	6.3%	6.1%	5.9%	5.8%
Radio**	2.3%	2.2%	2.1%	2.0%	1.9%	1.8%
Total media ad spending growth (% change)						
Digital	15.0%	12.0%	11.0%	9.0%	8.5%	7.0%
—Mobile	90.0%	45.0%	35.0%	26.0%	22.0%	15.0%
TV	6.0%	5.2%	3.5%	1.0%	1.0%	1.0%
Outdoor	3.0%	3.2%	2.8%	2.0%	1.8%	1.6%
Radio*	8.4%	2.6%	0.9%	0.2%	0.4%	0.1%
Print	-5.0%	-4.7%	-3.4%	-1.7%	-1.4%	-1.2%
—Magazines**	-5.0%	-4.5%	-3.3%	-2.0%	-1.5%	-1.2%
—Newspapers**	-5.0%	-4.8%	-3.5%	-1.6%	-1.4%	-1.2%
Total	7.5%	6.4%	6.0%	4.8%	4.7%	4.1%

Note: *print only; **excludes off-air radio & digital

Source: eMarketer, Sep 2015

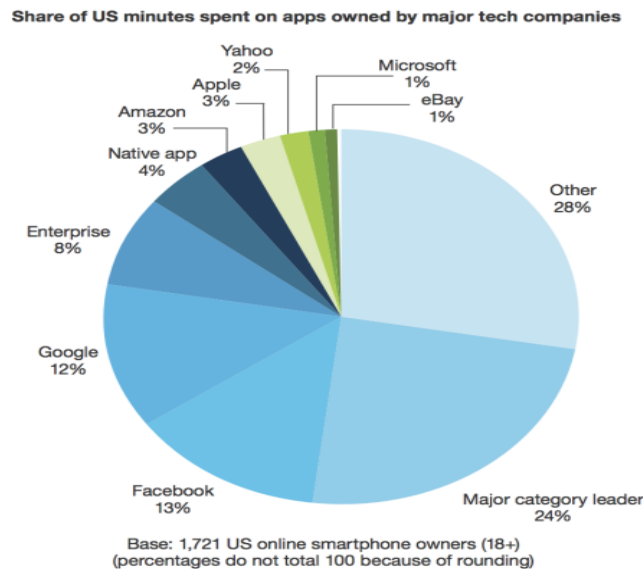
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The issue with mobile applications is that users tend to spend the most of their time in only a handful of apps (5 in the case of an US smartphone user, according to research carried out by Forrester research²⁵).

Figure 19 Share of US minutes spent on apps owned by major tech companies

Figure 3 A Handful Of Companies Dominate The Minutes Users Spend On Mobile Apps



Source: Forrester's US Consumer Technographics® Behavioral Study, October 2014 to December 2014

Therefore, few companies dominate the interaction between a smartphone user and content in applications. There is a risk of traditional players getting out crowded by dominant tech players, who have the technical know-how to take advantage of their growing user base and their attention to monetize their time spent with advertisers.

This is already the case in the US, according to eMarketer²⁶, where Google with a market share of 32.9% and Facebook with 19.4% in 2015, dominate more than half of the US mobile advertising market (and where 12 other tech players are set to take 20% of market shares, leaving only 32% to all other players on the mobile advertising space). Facebook already generates more than 75% of its advertising revenue from mobile²⁷ and YouTube generates more than 50% of its traffic from mobile²⁸ (but, according to reports, is not able to make any profit out of it more than 1 billion viewers²⁹) and both companies are in the first line to monetize³⁰ more

²⁵ See, "Consumers Spend 85% Of Time On Smartphones In Apps, But Only 5 Apps See Heavy Use", TechCrunch 22nd June 2015, available at: <http://techcrunch.com/2015/06/22/consumers-spend-85-of-time-on-smartphones-in-apps-but-only-5-apps-see-heavy-use/#.jxnocv:5bJy>

²⁶ See, "AOL, Millennial Face Uphill Battle to Capture Mobile Ad Dollars", eMarketer 8th September 2015, available at: <http://www.emarketer.com/Article/AOL-Millennial-Face-Uphill-Battle-Capture-Mobile-Ad-Dollars/1012954>

²⁷ See, "Facebook, Google Tighten Grip on Mobile Ads", The Wall Street Journal, 29th July 2015, available at: http://www.wsj.com/articles/facebook-revenue-rises-39-1438200350?mod=WSJ_TechWSJD_NeedToKnow

²⁸ See, "Half of YouTube's Traffic Is Now From Mobile", Recode 27th October 2014, available at: <http://recode.net/2014/10/27/youtube-code-mobile-1/>

²⁹ See, "YouTube: 1 Billion Viewers, No Profit", The Wall Street Journal, 25th February 2015, available at: <http://www.wsj.com/articles/viewers-dont-add-up-to-profit-for-youtube-1424897967>

³⁰ See, "Google Grows YouTube Views, Revenue Despite Facebook Threat", Variety 16th July 2015, available at: <http://variety.com/2015/digital/news/google-grows-youtube-views-revenue-despite->

this domination and their, almost captive, audience when it comes to the mobile application-based Internet by locking consumers into their application (YouTube's Top 100 advertisers increased their spending by 60% in the second quarter of 2015³¹).

Table 11 Net US Mobile Ad Revenue Share by Company, 2014-2017

Net US Mobile Ad Revenue Share, by Company, 2014-2017

% of total and billions

	2014	2015	2016	2017
Google	36.9%	32.9%	31.7%	31.7%
Facebook	18.5%	19.4%	19.2%	20.3%
Twitter	3.6%	3.8%	4.0%	4.4%
Yahoo	3.3%	2.9%	2.5%	2.4%
Apple (iAd)	2.5%	2.6%	2.8%	2.9%
Pandora	2.9%	2.4%	2.2%	2.2%
YP	2.7%	2.1%	1.8%	1.8%
Yelp	0.7%	0.7%	0.7%	0.7%
LinkedIn	0.3%	0.5%	0.5%	0.5%
Amazon	0.4%	0.4%	0.4%	0.5%
Millennial Media	0.5%	0.3%	0.3%	0.2%
Other	27.7%	32.0%	33.9%	32.5%
Total (billions)	\$19.15	\$30.45	\$42.01	\$50.84

Note: net ad revenues after companies pay traffic acquisition costs (TAC) to partner sites; includes display (banners and other, rich media and video), search and messaging-based advertising; ad spending on tablets is included; numbers may not add up to 100% due to rounding
Source: company reports; eMarketer, Sep 2015

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As Television is migrating towards “TV as an App³²³³” where App stores allow for cross-border content circulation and consumption, enabling global players to enter national audiovisual markets, and that TV is increasingly distributed through the Internet (with Netflix’s CEO Reed Hasting stating that “All TV will be Internet in 10-20 years³⁴”), getting a share of the increasing mobile advertising pie will be a hard play for most of today’s traditional media companies who have to adapt to this new market given.

The rising use of the mobile Internet, mostly in applications distributed in App stores owned by 4 tech players (Apple, Google, Amazon and Microsoft), by users worldwide is changing the media ecosystem. As more of the world population has their individual screen in their pockets (smartphones) or at home (tablets), increasing their time spent on the mobile web and applications, online mobile advertising will skyrocket worldwide and in Europe. The rules of the advertising market, after having changed with the introduction of digital advertising at the beginning of the worldwide web, are altered once again with the rise of the mobile Internet.

facebook-threat-1201542013/

³¹ See, “YouTube’s Top Advertisers Increased Their Spending by 60% in Q2”, Adweek 16th July 2015, available at: <http://www.adweek.com/news/technology/youtubes-top-advertisers-increased-their-spending-60-percent-q2-165943>

³² See, “Winners and Losers in TV’s New App Economy”, The Hollywood Reporter, 23rd September 2015, available at: <http://www.hollywoodreporter.com/news/winners-losers-tvs-new-app-826075>

³³ See, “Apple’s Tim Cook: “We Believe the Future of TV Is Apps””, The Wall Street Journal 9th September 2015, available at: <http://blogs.wsj.com/personal-technology/2015/09/09/apples-tim-cook-we-believe-the-future-of-tv-is-apps/>

³⁴ See, “Netflix CEO: All TV will be Internet in 10-20 yrs”, CNBC 20th September 2015, available at: <http://www.cnbc.com/2015/09/18/netflix-ceo-all-tv-will-be-internet-in-10-20-yrs.html>

Just as a footnote, we wanted to list the explorations of Google³⁵ who wants to prepare for a future without apps, after having already indexed apps in search results and tweaked its search algorithm³⁶ to favour sites that are mobile-friendly (with the first results already visible, traffic to non-mobile-friendly websites made by mobile searches falling by 12%³⁷), is now deep-linking and indexing apps between them in order to tie content between and within apps in order to maintain its position as the number one search engine (in a world where users access their content directly through apps, Google's search engine is less relevant and less used).

To quote Luther Lowe, VP of policy at Yelp as cited in Recode³⁸: The algorithm tweak is a blatant example of Google *“extending [its] search monopoly on mobile,”* *“This hypocritical and disturbing behaviour should have every antitrust enforcement agency on high alert.”*

Facebook on the other hand is aiming at making personalized ads appear on every phone running its app, making use of the collected data on users across devices³⁹. With already 2.5 million advertisers on its platform, the use of TV and online advertising, Facebook will enter increasingly in competition with TV and other publishers, which will have to choose between sharing their content (and the attached advertising revenues) with Facebook or trying to make their way on their own.

These two players, who exercise their domination on the mobile web through their huge global user base and diversified services (in publishing/search and advertising exchanges and platforms), are set to benefit to profit from the changes happening in the global advertising market.

³⁵ See, *“Google Dreams of a World After Apps but It’s a Nightmare for Rivals”*, Recode 3rd September 2015, available at: <http://recode.net/2015/09/03/google-dreams-of-a-world-after-apps-but-its-a-nightmare-for-rivals/>

³⁶ See, *“Google Gives Boost to Mobile-Friendly Sites”*, The Wall Street Journal 21st April 2015, available at: <http://www.wsj.com/articles/google-gives-boost-to-mobile-friendly-sites-1429660022>

³⁷ See, *“Google’s ‘Mobilegeddon’ Was a Big Deal, After All”*, The Wall Street Journal 15th July 2015, available at: <http://blogs.wsj.com/digits/2015/07/15/googles-mobilegeddon-was-a-big-deal-after-all/>

³⁸ See, *“Google Dreams of a World After Apps but It’s a Nightmare for Rivals”*, Recode 3rd September 2015, available at: <http://recode.net/2015/09/03/google-dreams-of-a-world-after-apps-but-its-a-nightmare-for-rivals/>

³⁹ See, *“Facebook Ads Are All-Knowing, Unblockable, and in Everyone’s Phone”*, Bloomberg Business 28th September 2015, available at: <http://www.bloomberg.com/news/articles/2015-09-28/facebook-ads-are-all-knowing-unblockable-and-in-everyone-s-phone>

3.4 Social Network advertising

Another driver of display advertising, and therefore online video ads, are social networks; Facebook, Twitter, Snapchat and LinkedIn being the main players on this market. The research company eMarketer estimates social networks ad revenues to pass from USD 25.14 billion in 2015 to USD 41 billion in 2017 up by +63% in just 2 years.

Table 12 Social Network Ad Revenues worldwide, by company 2014-2017 in USD billion

Social Network Ad Revenues Worldwide, by Company, 2014-2017

	2014	2015	2016	2017
Social network ad revenues (billions)				
Facebook	\$11.49	\$16.29	\$21.43	\$26.98
Twitter	\$1.26	\$2.03	\$2.95	\$3.98
LinkedIn	\$0.75	\$0.93	\$1.13	\$1.33
Other	\$4.36	\$5.88	\$7.41	\$8.72
Total social network ad spending	\$17.85	\$25.14	\$32.91	\$41.00
Social network ad revenue growth (% change)				
Twitter	111.2%	61.8%	45.0%	35.0%
Facebook	64.5%	41.8%	31.5%	25.9%
LinkedIn	33.2%	25.1%	20.5%	17.8%
Other	34.4%	35.0%	26.1%	17.6%
Total social network ad spending	56.8%	40.8%	30.9%	24.6%
Social network ad revenue share (% of total)				
Facebook	64.4%	64.8%	65.1%	65.8%
Twitter	7.0%	8.1%	9.0%	9.7%
LinkedIn	4.2%	3.7%	3.4%	3.2%
Other	24.4%	23.4%	22.5%	21.3%

Note: includes paid advertising appearing within social networks, social network games and social network apps; excludes spending by marketers that goes toward developing or maintaining a social network presence; numbers may not add up to total due to rounding

Source: eMarketer, Sep 2015

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www.eMarketer.com

Social networks are benefiting highly from network effects; the more users in the network, the more valuable/useful the network as whole becomes to users, therefore attracting even more users. Also, social networks profit from economies of scale, being able to amortize large investments and roll out innovations to its whole user base. Economies of scale and network effects render the social networks ad market concentrated; this is seen in the share of Facebook (around 65% of worldwide social ad revenues in the period 2014 to 2017) and Twitter (8.1% in 2015 of the global social network ad market). These two companies will dominate more than 70% of the total social ad market, with Facebook playing the role of the juggernaut.

The players on social network ad market are also targeting TV advertising budgets. This can be seen in the launch by Facebook and Twitter⁴⁰ of auto-play video advertising. Facebook is on the track to surpass YouTube by monthly played videos – passing from 1 billion videos a day in September 2014 to 4 billion videos a day in April 2015, thanks to its auto-play video feature⁴¹. Nomura estimates Face-

⁴⁰ See, “Twitter Finally Rolls Out Auto-Play Video”, The Wall Street Journal 16th June 2015, available at: http://blogs.wsj.com/cmo/2015/06/16/twitter-finally-rolls-out-auto-play-video/?mod=WSJ_TechWSJD_NeedToKnow

⁴¹ See, “As YouTube marks tenth year, Facebook emerges as video threat”, Reuters 23rd April 2015, available at: <http://www.reuters.com/article/2015/04/23/us-facebook-video-idUSKBN0NE1N520150423>

book to generate USD 3.8 billion by 2017 in online video revenues⁴² (compared to estimated video revenues of USD 8.5 billion for YouTube by 2017). In order to really challenge YouTube for the first place on the online video ad market⁴³, Facebook has partnered with media partners such as Disney, Vice Media in order to convince marketers to invest in sponsored video content with premium creators⁴⁴. Also, Facebook is encouraging publishers to host their content directly on the Facebook platform through the Instant Article initiative⁴⁵. A recent initiative to increasingly divert ad budgets from TV to Facebook was announced by Facebook and Nielsen in September 2015: the inclusion of Facebook's video ads into Nielsen total rating point, enabling advertisers to plan campaigns across TV and Facebook and letting Nielsen verify the delivery on the platform, a measure to strengthen confidence in Facebook advertising among potential advertisers⁴⁶. Facebook is stressing its reach⁴⁷, notably among millennials, and selling the benefits of ad campaigns across the TV screen and on Facebook to convince advertisers: from its quarterly results until now, the bet seems to pay off.

The importance of the mobile Internet for social networks can be inferred from Facebook's revenues and quarterly financial figures⁴⁸. In the second quarter 2015, Facebook's mobile advertising revenue represented 76% of total advertising revenues of USD 3.8 billion⁴⁹ (up by 39% year-to-year, from USD 2.6 billion in 2014 to USD 3.8 billion in 2015), with a 29% year-to-year increase of its mobile daily active user base to 844 million and a monthly mobile active user of 1.31 billion, up by 23% compared to last year. The increase of mobile ad revenues and the rise of mobile active users reflect the increased time spend by users in Facebook's applications (Facebook, Messenger, Instagram), at 46 minutes per day on average according to Facebook's CEO Zuckerberg⁵⁰.

As users spend more time in Facebook's applications, Facebook's mobile revenue⁵¹ is set to grow accordingly (the essence of two-sided platforms such as Facebook, Google – competition for users' attention on one side which in turn is

⁴² See, "Facebook's Bite into TV: Social Giant to Hit \$3.8 Billion in Video-Ad Sales by 2017, Analyst Says" Variety 17th March 2015, available at: <http://variety.com/2015/digital/news/facebook-bite-into-tv-social-giant-to-hit-3-8-billion-in-video-ad-sales-by-2017-analyst-says-1201454287/>

⁴³ See, "These Digital Stats Show Exactly Why Google Fears Facebook Ads", Adweek 15th July 2015, available at: <http://www.adweek.com/news/technology/these-digital-stats-show-how-facebook-ads-are-resonating-more-googles-165898>

⁴⁴ See, "Facebook Lines Up 7 Branded-Content Video Partners Including Vice, Disney" Variety 23rd April 2015, available at: <http://variety.com/2015/digital/news/facebook-lines-up-7-branded-content-video-partners-including-vice-disney-1201478229/>

⁴⁵ See, "Facebook Starts Hosting Publishers' 'Instant Articles'", TechCrunch 12th May 2015, available at: <http://techcrunch.com/2015/05/12/facebook-instant-articles/#.jxnocv:cBBZ>

⁴⁶ See, "Facebook Launches New Bid to Steal TV Advertising Dollars", Variety 28th September 2015, available at: <http://variety.com/2015/digital/news/facebook-tv-advertising-total-rating-point-1201603758/>

⁴⁷ See, "TV Campaigns Extend Reach via Facebook Ads" eMarketer 29th July 2015, available at: <http://www.emarketer.com/Article/TV-Campaigns-Extend-Reach-via-Facebook-Ads/1012788>

⁴⁸ See, "Facebook, Google Tighten Grip on Mobile Ads", The Wall Street Journal 29th July 2015, available at: http://www.wsj.com/articles/facebook-revenue-rises-39-1438200350?mod=WSJ_TechWSJD_NeedToKnow

⁴⁹ See, "Facebook Reports Second Quarter 2015 Results", Facebook Investor Relations 29th July 2015, available at: <http://investor.fb.com/releasedetail.cfm?ReleaseID=924562>

⁵⁰ See, "Facebook, Google Tighten Grip on Mobile Ads", The Wall Street Journal 29th July 2015, available at: http://www.wsj.com/articles/facebook-revenue-rises-39-1438200350?mod=WSJ_TechWSJD_NeedToKnow

⁵¹ See, "Facebook: Now More Mobile Than Ever", Recode 29th July 2015, available at: <http://recode.net/2015/07/29/facebook-now-more-mobile-than-ever/>

monetized on the other side by selling this attention to advertisers).

Instagram has hit 400 million users⁵² and is rolling also out online video advertising on a global basis⁵³; eMarketer⁵⁴ estimates Instagram's net mobile ad revenues to pass from USD 0.6 billion in 2015 to USD 2.81 billion by 2017, representing 10.6% of Facebook's total ad revenue by that date and if the estimates are correct, Instagram will surpass Google and Twitter in mobile display ad revenues in the US (according to analysis by MoffettNathanson Instagram, once mature, will male at least USD 5 billion per year and could under the right conditions make as much as USD 11 billion in advertising revenues per year⁵⁵). Add to this that Facebook properties include WhatsApp with 800 million users⁵⁶ (mostly mobile) and Messenger with 700 million users⁵⁷ as of the first half of 2015 and plans to monetize this huge user base by allowing businesses to interact with users⁵⁸, and Facebook's grip on the mobile ad market seems stern at this moment in time. To quote Facebook's COO Sheryl Sandberg: *"We are competing for consumer time and attention and we are also competing for marketing dollars," "The shift to mobile is very beneficial to Facebook. As people spend more time on mobile, they are spending more time on our products."*⁵⁹

⁵² See, "Instagram passes 400m users as young shun tweets for photo op", The Guardian 23rd September 2015, available at: <http://www.theguardian.com/technology/2015/sep/23/instagram-400m-users-young-app-twitter>

⁵³ See, "Instagram Gets More of Facebook's Global Advertising Power", Bloomberg Business 9th September 2015, available at: <http://www.bloomberg.com/news/articles/2015-09-09/instagram-gets-more-of-facebook-s-global-advertising-power>

⁵⁴ See, "Instagram Mobile Ad Revenues to Reach \$2.81 Billion Worldwide in 2017", eMarketer 27th July 2015, available at: <http://www.emarketer.com/Article/Instagram-Mobile-Ad-Revenues-Reach-281-Billion-Worldwide-2017/1012774>

⁵⁵ See, "How Facebook Turned Instagram Into a \$5 Billion Business", Recode 18th September 2015, available at: <http://recode.net/2015/09/18/how-facebook-turned-instagram-into-a-5-billion-business/>

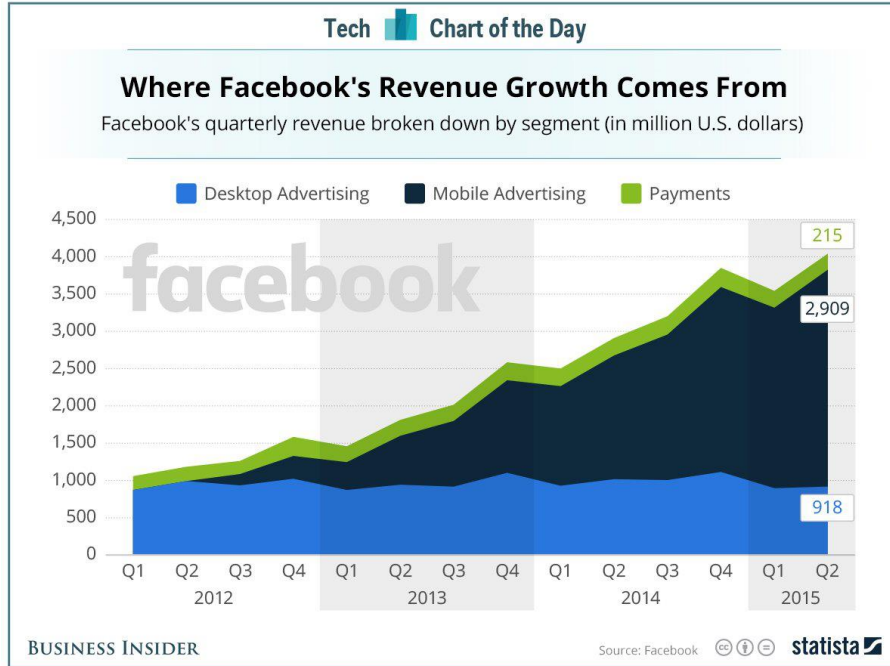
⁵⁶ See, "WhatsApp Hits 800 Million Users — 1 Billion by Year-End?", The Wall Street Journal 17th April 2015, available at: <http://blogs.wsj.com/digits/2015/04/17/whatsapp-hits-800000-users-1-billion-by-year-end/>

⁵⁷ See, "Facebook's Messenger App Hits 700 Million Users", Forbes 12th June 2015, available at: <http://www.forbes.com/sites/abigailtracy/2015/06/12/facebooks-messenger-app-hits-700-million-users/>

⁵⁸ See, "Facebook's Playbook For Monetizing Messenger And WhatsApp", TechCrunch 29th July 2015, available at: <http://techcrunch.com/2015/07/29/ease-them-into-it/>

⁵⁹ See, "Is Facebook a TV Alternative for Advertisers? Not Yet." Recode 29th July 2015, available at: <http://recode.net/2015/07/29/is-facebook-a-tv-alternative-for-advertisers-not-yet/>

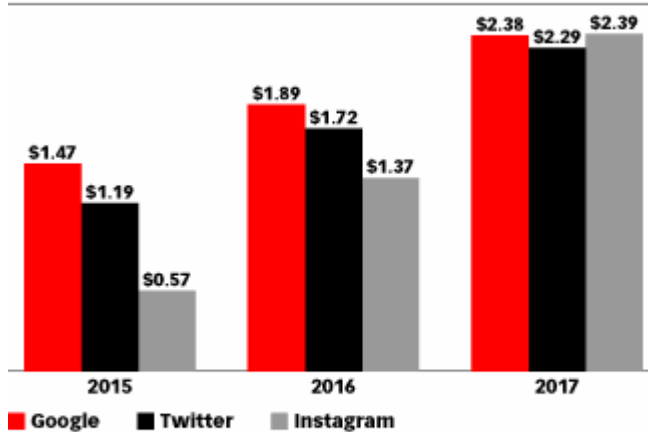
Figure 20 Source of Facebook's revenue, 2012-2015, USD million



Source: Business Insider and Statista⁶⁰

Figure 21 Instagram, Google and Twitter Net US Mobile Display Ad revenues 2015-2017, in USD billion

Instagram, Google and Twitter Net US Mobile Display Ad Revenues, 2015-2017
billions



Note: net ad revenues after companies pay traffic acquisition costs (TAC) to partner sites; includes display (banners and other, rich media and video); ad spending on tablets is included; excludes SMS, MMS and P2P messaging-based advertising

Source: company reports; eMarketer, July 2015

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www.eMarketer.com

⁶⁰ See, "Facebook is the undisputed king of the tech industry now", Business Insider 2nd August 2015, available at: <http://uk.businessinsider.com/facebook-rules-2015-7?>

The huge trove of personal data, which social networks are selling⁶¹, is a marketers dream: likes and dislikes, personal relationships, location information all this can be retrieved from their users who give, willingly or not, this information away. Therefore it comes as no surprise that the major social networks such as Facebook^{62,63}, Twitter⁶⁴ and LinkedIn⁶⁵ have opened their ad products to allow advertisers to reach users outside of their respective sites and applications. This development will enable these players to monetize further user data and increase their ad revenues. The shift towards the mobile Internet, through the increasingly amount of time spend by users on applications and their mobile devices, will benefit hugely the companies which have been able to adapt rapidly to this evolution in consumer habits. Brands and advertisers rely increasingly on social networks to target audience they want to reach, and this in return is reflected in the increasing value of a social network user (ad revenues per user for social networks). Facebook will have an average ad revenue per US user which increases from USD 34.68 in 2014 to UDS 73.29 in 2017 (respectively from USD 6.25 to 10.79 for non-US user, no EU data available) and Twitter's US average user ad revenue will increase from UDS 17.06 to USD 39.8 by 2017.

Table 13 Facebook and Twitter Ad Revenues per User Worldwide, US vs. Non-US 2014-2017

	2014	2015	2016	2017
Facebook and Twitter Ad Revenues per User Worldwide, US vs. Non-US, 2014-2017				
US				
Facebook ad revenues per Facebook user*	\$34.68	\$48.76	\$61.06	\$73.29
Twitter ad revenues per Twitter user**	\$17.06	\$24.48	\$32.22	\$39.80
Non-US				
Facebook ad revenues per Facebook user*	\$6.25	\$7.71	\$9.26	\$10.79
Twitter ad revenues per Twitter user**	\$2.37	\$3.51	\$4.66	\$5.92
Worldwide				
Facebook ad revenues per Facebook user*	\$10.03	\$12.76	\$15.18	\$17.50
Twitter ad revenues per Twitter user**	\$5.48	\$7.75	\$10.12	\$12.56
<i>Note: among users of the above via any device at least once per month; paid advertising only; *excludes spending by marketers that goes toward developing or maintaining a Facebook presence; **excludes spending by marketers that goes toward developing or maintaining a Twitter presence</i>				
<i>Source: company reports; eMarketer, Sep 2015</i>				
196308	www.eMarketer.com			

As can be inferred from the figures in this section, social network advertising is a main driver of online ad spend. The impressive growth figures and user bases of the main players on this market support this conclusion. As ad budgets are more

⁶¹ See, "Facebook Is Putting More of Your Data Into Its Ad-Relevancy Machine", The Wall Street Journal 18th September 2015, available at: <http://blogs.wsj.com/digits/2015/09/18/facebook-is-putting-more-of-your-data-into-its-ad-relevancy-machine/?mod=ST1>

⁶² See, "Facebook Will Use Facebook Data to Sell Ads on Sites That Aren't Facebook", Recode 28th September 2014, available at: <http://recode.net/2014/09/28/facebook-will-facebook-data-to-sell-ads-on-sites-that-arent-facebook/>

⁶³ See, "Facebook Opens Its Mobile Ad "Audience Network" To All Advertisers And Apps", TechCrunch 7th October 2015, available at: <http://techcrunch.com/2014/10/07/facebook-audience-network-ads/>

⁶⁴ See, "Twitter Pushes Mobile Video Ads, Promoted Tweets to Third-Party Apps", Variety 20th August 2015, available at: <http://variety.com/2015/digital/news/twitter-pushes-mobile-video-ads-promoted-tweets-to-third-party-apps-1201574475/>

⁶⁵ See, "LinkedIn Ads Now Follow You Around the Web", Recode 19th February 2015, available at: <http://recode.net/2015/02/19/linkedin-ads-now-follow-you-around-the-web/>

and more captured by these players (over 70% of market share on the worldwide social advertising market for the 2 main players, Facebook and Twitter), and Television ad budgets are increasingly challenged by the superior targeting possibilities (combined with the form of storytelling searched by marketers on TV, video) and the wider reach of social networks, the future will be challenging for traditional players (For now, there is no European juggernaut in the social network market to our knowledge).

As a recent example of this domination in users' attention and advertising budgets, the case of the case of *The Washington Post* can be cited. It decided to publish its entire articles on Facebook's Instant Articles⁶⁶, hosted on Facebook. This shows the importance of Facebook and other social networks in providing publishers⁶⁷, such as *The Washington Post*, with their audience and ultimately with advertising opportunities (for now, publishers can keep 100% of ad revenues if they sell them themselves, or 70% if Facebook is selling the ads). Social networks have a strategic place between publishers of audiovisual content and their audiences, and will be in a perfect position to monetize further this situation, as forecasts of their advertising revenues show.

With Facebook's head of ad product declaring that "A year or two from now, we think Facebook will be mostly video⁶⁸", audiovisual players are warned. Brands and Advertisers will invest increasingly in social networks advertisement with the aim of addressing targeted ads to their core audience and prospective consumers.

3.5 Increased role for tech companies as intermediaries between advertisers and consumers

Several initiatives and enhancements for online ads such as integrated "Buy" buttons on ads (developed mainly by Google⁶⁹, Facebook⁷⁰ and Amazon⁷¹ with social network sites such as Twitter⁷², Pinterest⁷³, which recently reached 100 million users, or Instagram being other candidates to jump or which have already jumped on the "Buy Button" wagon), prefilled contact information⁷⁴, social logins and simi-

⁶⁶ See, "First Click: Jeff Bezos is taking his newspaper where the ads are", The Verge 23rd September 2015, available at: <http://www.theverge.com/2015/9/23/9381245/first-click-jeff-bezos-is-taking-his-newspaper-where-the-ads-are>

⁶⁷ See, "Publishers Warily Embed With Facebook", The Wall Street Journal, 11th May 2015, available at: <http://www.wsj.com/articles/publishers-warily-embed-with-facebook-1431387002>

⁶⁸ See, "Facebook Exec: Facebook Will Be Mostly Video Soon", Variety 16th September 2015, available at: <http://variety.com/2015/digital/news/facebook-exec-facebook-will-be-mostly-video-soon-1201595182/>

⁶⁹ See, "Google Says 'Buy' Button Coming to Online Advertising Service", Bloomberg 27th May 2015, available at: <http://www.bloomberg.com/news/articles/2015-05-27/google-says-buy-button-coming-to-online-advertising-service>

⁷⁰ See, "Facebook Adds Buy Button Integration As It Continues To Reinvent Pages", TechCrunch 15th July 2015, available at: <http://techcrunch.com/2015/07/15/cant-buy-me-love/#.jxnocv:HEfu>

⁷¹ See, "Amazon's push-to-buy Dash buttons are now basically free", The Verge 2nd September 2015, available at: <http://www.theverge.com/2015/9/2/9241865/amazon-dash-button-price-drop>

⁷² See, "Twitter expands 'Buy' button to more than 100,000 merchants", Fortune 6th August 2015, available at: <http://fortune.com/2015/08/06/twitter-buy-button/>

⁷³ See, "Pinterest Launches the Buy Button", Recode 2nd June 2015, available at: <http://recode.net/2015/06/02/pinterest-launches-the-buy-button/>

⁷⁴ See, "Marketers Will Drool Over Facebook's New Signup Ads That Auto-Fill Your Email Or Number", TechCrunch 25th June 2015, available at: <http://techcrunch.com/2015/06/25/facebook-lead-ads/#.jxnocv:Nfma>

lar developments aim to shorten the path to sales⁷⁵ as an user's response to an ad. Simply put, they want to further disrupt online retail⁷⁶ and place themselves as essentials go-betweens for consumers and advertisers.

As buy buttons are quite recent being launched mostly this years, challenges remain to overcome by all this players in order to convince advertisers, allay fear of retailers which business they might disrupt and convince consumers to use their service⁷⁷.

The ultimate goal of these companies is to be able to influence consumers to make a purchase and therefore prove their superiority in terms of return of investment on advertising spend compared to television. Google recently announced changes⁷⁸ (making use of Gmail addresses to give advertisers the ability to address targeted ads at consumers in search results and YouTube and to integrate mobile applications in search, Google's display ad network, Google Play and YouTube) which will put the company further between advertisers and consumers, and improve its ability to influence purchase decisions: the ultimate aim of all commercial advertising.

However, it is still too early to judge on the impact of these developments but the main direction ad tech players are pursuing is certainly encouraged: increase confidence from advertisers, place themselves as intermediaries between the audience and advertisers and eventually, challenge TV and other Medias for the predominant spot on the global advertising market.

⁷⁵ See, "YouTube shortens path to purchase", Warc 25th May 2015, available at:

http://www.warc.com/Content/News/N34817_YouTube_shortens_path_to_purchase.content?PUB=Warc%20News&CID=N34817&ID=963fbfde-9e87-47c5-901b-e9f9370b32e2&q=&qr=

⁷⁶ See, "Buy now' disrupts online retail", Warc 18th August 2015, available at:

http://www.warc.com/Content/News/N35252_Buy_now_disrupts_online_retail_content?PUB=Warc%20News&CID=N35252&ID=b87a78a0-0c53-46ae-af1b-021e848814c3&q=&qr=

⁷⁷ See, "Why 'Buy' Buttons Will Pose Big Challenges for Google, Facebook, Pinterest and Twitter", Recode 14th June 2015, available at: <http://recode.net/2015/06/14/why-buy-buttons-will-pose-big-challenges-for-google-facebook-pinterest-and-twitter/>

⁷⁸ See, "With New Ad Features Tapping Gmail, YouTube and Mobile, a Step Closer to 'One Google'", Recode 28th September 2015, available at: <http://recode.net/2015/09/28/with-new-ads-features-using-youtube-mobile-and-gmail-a-step-closer-to-one-google/>

3.6 An even more connected future will further drive the online advertising market

The development and up-take of the Connected home, with the Internet of Things⁷⁹ (IoT), will surely present increasing opportunities and an increased number of screens for advertisers to reach their desired audience. Many tech players, such as Google, Amazon and Apple⁸⁰ are in prime positions to take advantage of the premises of this new home and living room⁸¹, where connected devices & televisions and Smart TVs are in the front row to act as the interface for the smart home⁸². At the time of this report, it is only a outlook into what the future reserves for opportunities to further increase the reach of online advertising, extending the reach into homes and eventually into everyday's life⁸³.

Another possible extension for online advertising might be the rising of Virtual Reality. Again, at this stage it is too early to judge or analyse the possible impacts of virtual reality on the online advertising market but with such players as Facebook with the Oculus Rift⁸⁴, Sony with the PlayStation VR headset⁸⁵, Samsung⁸⁶ and traditional media companies such as Walt Disney, ProSieben and Sky⁸⁷ launching devices and supporting development of virtual reality, another platform for content consumption and therefore advertising may be nascent.

⁷⁹ See, "Five ways to bring advertising to life in the internet of things", The Guardian 28th July 2015, available at: <http://www.theguardian.com/media-network/2015/jul/28/internet-things-advertising-marketing>

⁸⁰ Each of the quoted companies - and many others such as Roku, Microsoft, Intel - are developing connected HDMI dongles (Chromecast, Fire TV Stick, Intel's Compute Stick), connected media players (AppleTV, Roku's Media Player, Amazon's Fire TV, Android TV)

⁸¹ See, "As tech giants prepare for connected living, marketers risk being left behind", The Guardian 16th March 2015, available at: <http://www.theguardian.com/media-network/2015/mar/16/technology-connected-living-google-apple-facebook-marketers>

⁸² See, "All the Ways a New Apple TV Could Dominate Your Living Room", Wired 24th March 2015, available at: <http://www.wired.com/2015/03/ways-new-apple-tv-dominate-living-room/>

⁸³ See, "Marketers increasing spend on Connected TV", Advanced Television 1st September 2015, available at: <http://advanced-television.com/2015/09/01/marketers-increasing-spend-on-connected-tv/>

⁸⁴ See, "Why Facebook's \$2 Billion Bet on Oculus Rift Might One Day Connect Everyone on Earth", Vanity Fair October 2015, available at: <http://www.vanityfair.com/news/2015/09/oculus-rift-mark-zuckerberg-cover-story-palmer-luckey>

⁸⁵ See, "Sony's First Virtual-Reality Set to Offer More Than 10 Titles", Bloomberg 17th September 2015, available at: <http://www.bloomberg.com/news/articles/2015-09-17/sony-to-offer-more-than-10-titles-with-first-virtual-reality-set>

⁸⁶ See, "Samsung and Oculus Announce \$99 Gear VR Headset for Galaxy Phones", The Wall Street Journal 24th September 2015, available at: http://blogs.wsj.com/digits/2015/09/24/samsung-and-oculus-announce-99-gear-vr-headset-for-galaxy-phones/?mod=WSJ_TechWSJD_topRight

⁸⁷ See, "Disney, Sky and ProSiebenSat.1 invest in VR firm Jaunt", Digital TV Europe 22nd September 2015, available at: <http://www.digitaltveurope.net/431041/disney-sky-and-prosiebensat-1-invest-in-vr-firm-jaunt/>

3.7 Viewability of online advertisements, traffic fraud and Ad blocking - a threat to online advertisements

Even if the momentum lies in online advertising for various reasons as the previous section has shown, challenges remain on the online landscape in order to completely alleviate doubts from advertisers and marketers on the effectiveness of online ads and to reassure media and publishers on their future advertising revenues.

The recent discussions about the implications of ad-blocking⁸⁸, highlighted by Apple's move to allow ad-blocking on its iOS devices⁸⁹, illustrate these challenges for online advertising players. Other important issues for advertisers (and therefore for publishers and ultimately ad tech players such as Google and Facebook) are the viewability of online ads (are ads effectively seen) and traffic fraud (robots used to generate false traffic on advertisements and false clicks on click-through ads).

3.7.1 Viewability of online ads and traffic fraud

The debate on the viewability of ads reached mainstream media when Google declared in April 2015, using comScore data, that only 54% of video ads across the web are not viewable in third quarter of 2014⁹⁰ (an online video ad is defined as viewable by the Media Rating Council and IAB only if 50% of its pixels are visible on the screen for at least two consecutive seconds). In the same declaration, Google stated that this is not the case for videos on YouTube where 91% of ads are viewable.

A lack of universal metrics, accounting if an ad has effectively been seen by a human, lies at the source of this problem. Even if publishers have reworked their websites to ensure that ad placements are seen on the screen, desktop or mobile, the source of the problem is in traffic fraud, false impressions and clicks generated by robots. Estimates made by the Association of National Advertisers⁹¹ (for the global online advertisement market) place the loss for advertisers at USD 6.3 billion a year to "click fraud"⁹².

Google has responded to critics by establishing a new measurement⁹³ to ensure that its video ads have been seen by users and is also more vehemently pushing and pursuing ad fraud⁹⁴ (in 2014, Google claims having disabled more than 524 million bad ads and banned more than 214 000 advertisers from its Ad Network⁹⁵).

⁸⁸ See, "The ad blocking controversy, explained", Vox 18th September 2015, available at:

<http://www.vox.com/2015/9/18/9351759/ad-blocking-controversy>

⁸⁹ See, "Apple's Ad Blockers Rile Publishers", The Wall Street Journal 30th August 2015, available at: <http://www.wsj.com/articles/apples-ad-blockers-raise-tensions-1440974849?mod=LS1>

⁹⁰ See, "Only Half of Online Video Ads Are Viewable, Google Says", The Wall Street Journal 8th May 2015, available at: <http://blogs.wsj.com/digits/2015/05/08/only-half-of-online-video-ads-are-viewable-google-says/?mod=ST1>

⁹¹ See, "Online ad revenue at risk in war on 'click fraud'", Reuters 23rd March 2015, available at: <http://www.reuters.com/article/2015/03/23/us-advertising-cyberfraud-idUSKBN0MJ0Z820150323>

⁹² See, "The Bot Baseline: Fraud in Digital Advertising", ANA, available at: <http://www.ana.net/content/show/id/botfraud>

⁹³ See, "Google Unveils a Tool to Check If Users Are Looking at Video Ads", Bloomberg Business 6th January 2015, available at: <http://www.bloomberg.com/news/articles/2015-01-06/google-unveils-a-tool-to-check-if-users-are-looking-at-video-ads?cmpid=linkedin.company>

⁹⁴ See, "Inside Google's secret war against ad fraud", Advertising Age 18th May 2015, available at: <http://adage.com/article/digital/inside-google-s-secret-war-ad-fraud/298652/>

⁹⁵ See, "Google disabled 524m 'bad ads' and banned 214k advertisers in 2014", The Guardian, 4th

However, as recently as September 2015, a study undertaken by European researchers claims that Google's YouTube is continuing to charge advertisers for fake YouTube views, generated by bots⁹⁶. Facebook has also undertaken changes to how it measures views of ads by partnering with Moat in order to deliver 100% in-view impressions of ads⁹⁷ placed on the social network. This change was made after advertisers demanded more accountability of Facebook on the effective delivery of its online ads and to change how it charges them⁹⁸. Moat is the same measurement firm that ensures that video ads on Twitter are seen, Twitter⁹⁹ having taken this step to gain trust among advertisers 3 months before Facebook. Facebook has been violently criticized for its ad measurement standards, notably by WPP's CEO Martin Sorell who said on Facebook's video ads¹⁰⁰: "*Three seconds—and 50 percent of video online not listened to with sound—is ludicrous, "The standards have to change."* Facebook in the same time is rolling out new ad tools¹⁰¹ – “Target rating points – with Nielsen to further sell its reach to advertisers who wish to launch advertising campaigns across Facebook and TV.

As these changes only occurred recently, consequences on marketers trust and confidence are not yet measurable. But the viewability issue coupled to traffic fraud¹⁰² is certainly one of the hot topics for marketers for the foreseeable future¹⁰³.

3.7.2 Ad Blocking

The ad blocking debate, existing before Apple's iOS update, has been around for a while. Advertising is rather seen as intrusive and disliked by users who wish to consume their content without interruptions from ads. In 2015, it has been made public that big Internet players such as Google, Amazon, Microsoft and Taboola have paid the developer of Adblock Plus to unblock ads to their websites¹⁰⁴. (The French telecom provider Free has tried to block ads automatically for its subscribers in 2013 but had to abandon this option rapidly after severe critics by publish-

February 2015, available at: <http://www.theguardian.com/technology/2015/feb/04/google-disabled-bad-ads-malware-counterfeiters-scams>

⁹⁶ See, "Google charges advertisers for fake YouTube video views, say researchers", The Guardian 23rd September 2015, available at: <http://www.theguardian.com/technology/2015/sep/23/google-advertisers-fake-youtube-video-views-adwords-bot>

⁹⁷ See, "Facebook Announces 100% In-View Ad Impressions, Moat Measurement", Adweek 17th September 2015, available at: <http://www.adweek.com/socialtimes/100-percent-in-view-ad-impressions-moat-measurement/626794>

⁹⁸ See, "Facebook Bends to Advertiser Viewability Demands", The Wall Street Journal 17th September 2015, available at: <http://blogs.wsj.com/digits/2015/09/17/facebook-bends-to-advertiser-viewability-demands/?mod=ST1>

⁹⁹ See, "Twitter Finally Rolls Out Auto-Play Video", The Wall Street Journal 16th June 2015, available at: <http://blogs.wsj.com/cmo/2015/06/16/twitter-finally-rolls-out-auto-play-video/>

¹⁰⁰ See, "Facebook's 'Ludicrous' Video Ad Metrics Highlight Digital's Lingering Low Standards, Martin Sorell Says", Adweek 16th September 2015, available at: <http://www.adweek.com/news/technology/wpp-chief-martin-sorell-calls-facebooks-three-second-video-metric-ludicrous-166948>

¹⁰¹ See, "Facebook offers new TV ad tools", Warc 29th September 2015, available at: http://www.warc.com/LatestNews/News/Facebook_offers_new_TV_ad_tools.news?ID=35463

¹⁰² See, "Is the Online Ad Industry Cleaning Up Its Act?", The Wall Street Journal 6th April 2015, available at: <http://blogs.wsj.com/digits/2015/04/06/is-the-online-ad-industry-cleaning-up-its-act/?mod=ST1>

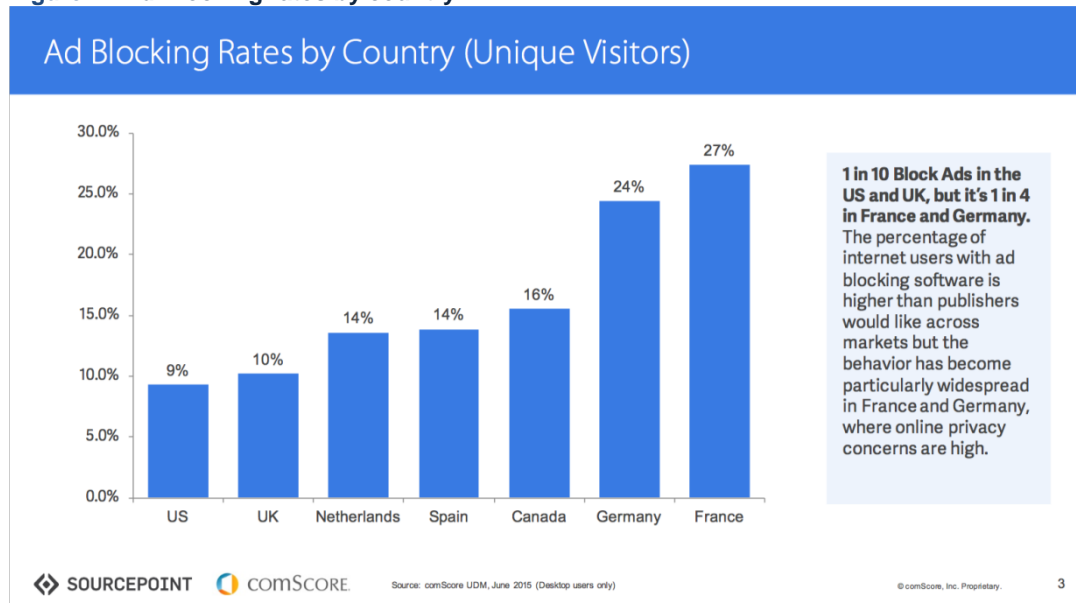
¹⁰³ See, "Viewability, adblocking tax marketers", Warc 21st September 2015, available at: http://www.warc.com/LatestNews/News/Viewability_adblocking_tax_marketers.news?ID=35421

¹⁰⁴ See, "Tech giants pay to avoid ad blocking", Warc 3rd February 2015, available at: http://www.warc.com/LatestNews/News/Tech_giants_pay_to_avoid_ad_blocking.news?ID=34249

ers¹⁰⁵). Ad blocking is therefore not new but Apple's generalisation of ad blockers of the iPhone have revived the debate and fears of publishers, relying on advertising for their income.

In the USA, survey companies Moz and Fractl have found that 63% of US Millennials use ad blockers¹⁰⁶. In Europe, Ad blocking is also widespread with 27% of France's Internet users using ad blockers, 24% of Germans and 10% in the United Kingdom.

Figure 22 Ad Blocking rates by country



Overall, Adobe and PageFair¹⁰⁷ estimate that the use of ad blocking software grew by 41% compared to last year. In 2015, it is estimated that 200 million Internet users are using Ad blockers¹⁰⁸. So what is the problem with ad blocking?

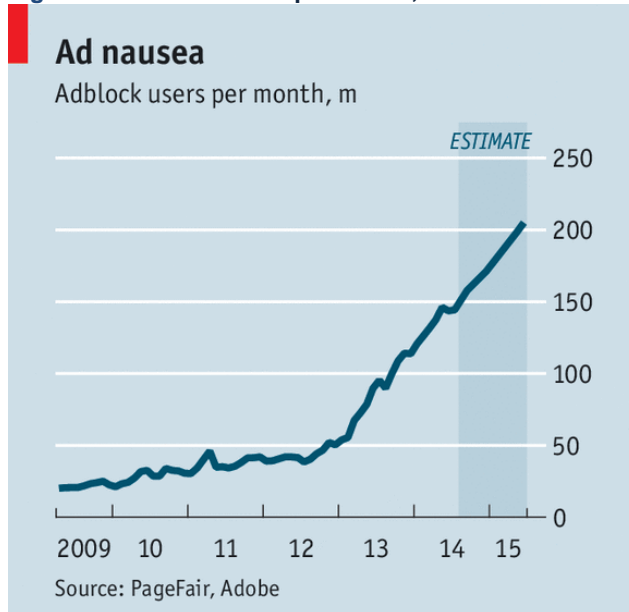
¹⁰⁵ See, "Free provoque Google en bloquant sa publicité », Les Echos 3rd January 2013, available at : http://www.lesechos.fr/03/01/2013/lesechos.fr/0202479067147_free-provoque-google-en-bloquant-sa-publicite.htm

¹⁰⁶ See, "Nearly Two in Three Millennials Block Ads", eMarketer 21st September 2015, available at: <http://www.emarketer.com/Article/Nearly-Two-Three-Millennials-Block-Ads/1013007>

¹⁰⁷ See, "The 2015 Ad Blocking Report", Adobe and PageFair, available at: <http://blog.pagefair.com/2015/ad-blocking-report/>

¹⁰⁸ See, "Block shock", The Economist 6th June 2015, available at: <http://www.economist.com/news/business/21653644-internet-users-are-increasingly-blocking-ads-including-their-mobiles-block-shock>

Figure 23 Adblock users per month, in millions



Economist.com

The problem lies in lost revenues for publishers. Ads which are not blocked are not counted as seen, and the publishers therefore loss revenues. This can be extremely damaging to smaller publishers who rely heavily on advertising revenues. The loss of revenues could potentially up-end the business model of many publishers on the Internet as it remains still an ecosystem where content is mostly consumed for free by Internet users, in exchange for their exposition to advertisements.

The ad blocking debate is set to last until publishers, advertisers and the tech firms have found an acceptable equilibrium. It stresses the underlying problems of many publishers and audiovisual players in Europe and worldwide: relying on advertising expenditures to run their businesses, advertising budgets which will eventually migrate increasingly towards the online space, controlled by powerful tech companies which act as intermediaries between publishers and their audience and therefore control the access to their content.

The ad blocking debate highlights the changing media ecosystem, from analogue to digital, with changed rules be it for advertisement, content acquisition and consumption and finally, a global competition for revenues among traditional national players and new entrants, mostly international and coming from the tech world.

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