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DIGITAL ADVERTISING MARKET

Market scope

Banner Advertising

Social Media Advertising

Video Advertising

Search Advertising

Online Classifieds
Summary

Digital Advertising uses the internet to deliver marketing messages in various formats to internet users. This includes Banners (e.g. Skyscrapers, Overlays, Rich Media formats), video pre-rolls or mid-rolls, Search Advertising as well as Online Classifieds and Social Media Advertising.

These Digital Advertising market segments can be divided into desktop and mobile revenue depending on the delivery method such as desktop computers or mobile devices (smartphones and tablet PCs).

Search Advertising was the biggest segment worldwide¹ with US$90.7 billion in revenue and a 46% share of the market. It plays an even more decisive role in China, where 55% of Digital Advertising revenue is generated by Search Advertising.

With a 9.4% CAGR² to 2021 Search Advertising will sustain its leading position.

Banner Advertising is the second largest segment with US$43.5 billion globally, followed by Social Media Advertising with US$27.1 billion. Both segments have an above-average share in the US.

Video Advertising is the fastest growing segment in the Digital Advertising market with a 17% CAGR by 2021.

The market volume of Online Classifieds is the smallest with US$16.5 billion in total. However, in Europe the Online Classifieds market is bigger than Social Media Advertising in 2016.

The development of Digital Advertising will be shaped by a shift from desktop to mobile. While the share of global mobile revenue is 40% in 2016, the expected share in 2021 is 59%.

The most affected segment will be Social Media Advertising. We expect a mobile share of 81%, due to a trend towards mobile-only social networks.

Key takeaways

Banner Advertising

Banner Advertising benefits significantly from a shift from desktop to mobile. Mobile Banner Advertising is growing at 18.2% p.a. It was the second largest segment of Digital Advertising in 2016.

Video Advertising

Video Advertising is the fastest growing segment in Digital Advertising with an expected revenue of US$45.5 billion in 2017.

Search Advertising

Search Advertising is dominating Digital Advertising with a 46% share of the global market. Nevertheless it is still growing with a 9.4% CAGR to 2021 and benefits considerably from a shift from desktop to mobile.

Social Media Advertising

The global Social Media Advertising market has a size of US$27.1 billion in 2016. China has an average annual growth rate of 12.6%.

Online Classifieds

The market volume of Online Classifieds is the smallest with a total of US$16.5 billion. Nevertheless Online Classifieds play a significant role in the European Digital Advertising market.

¹ Selected region only includes countries listed in the Digital Market Outlook
² CAGR: Compound Annual Growth Rate/average growth rate per year
Global segment sizes and growth rates

Global¹ Digital Advertising Revenue

<table>
<thead>
<tr>
<th>Segment</th>
<th>2016</th>
<th>2021</th>
<th>CAGR³ 16 – 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Advertising</td>
<td>198,439</td>
<td>332,199</td>
<td>10.9% p.a.</td>
</tr>
<tr>
<td>Banner</td>
<td>43,468</td>
<td>69,778</td>
<td>9.9% p.a.</td>
</tr>
<tr>
<td>Search</td>
<td>20,705</td>
<td>45,470</td>
<td>17.0% p.a.</td>
</tr>
<tr>
<td>Video</td>
<td>90,740</td>
<td>142,462</td>
<td>9.4% p.a.</td>
</tr>
<tr>
<td>Social Media</td>
<td>27,065</td>
<td>48,917</td>
<td>12.6% p.a.</td>
</tr>
<tr>
<td>Classifieds</td>
<td>16,461</td>
<td>25,572</td>
<td>9.2% p.a.</td>
</tr>
</tbody>
</table>

1: Only includes countries listed in the Digital Market Outlook
2: CAGR: Compound Annual Growth Rate/ average growth rate per year
3: Source: Digital Market Outlook 2016
MAIN DRIVERS FOR DIGITAL ADVERTISING IN REGIONAL COMPARISON

**United States**
- **GDP / Capita**: US$57,766
- **Population**: 323.3m
- **Facebook user**: 191.3m
- **Mobile penetration**: 70%

**Europe**
- **GDP / Capita**: US$35,862
- **Population**: 671.2m
- **Facebook user**: 261.0m
- **Mobile penetration**: 62%

**China**
- **GDP / Capita**: US$15,184
- **Population**: 1,378.2m
- **Facebook user**: 52.9m
- **Mobile penetration**: 70%

**Global**
- **GDP / Capita**: US$19,890
- **Population**: 5,060.2m
- **Facebook user**: 1,181.3m
- **Mobile penetration**: 48%

1: Selected region only includes countries listed in the Digital Market Outlook
2: Estimate based on consumer surveys; Officially not available in China
Sources: Eurostat, University of Beijing, Census Bureau, Trading Economics, Statista Digital Market 2016 Outlook
Total Digital Advertising revenue by country in billion US$

**United States**
- 2016: 80.2 billion US$
- 2021: 116.1 billion US$

**Europe**
- 2016: 42.2 billion US$
- 2021: 60.2 billion US$

**China**
- 2016: 43.9 billion US$
- 2021: 98.7 billion US$

**ROW**
- 2016: 32.2 billion US$
- 2021: 57.3 billion US$

1: Rest of world; selected region only includes countries listed in the Digital Market Outlook
The Digital Advertising ecosystem is very diverse and includes many different kinds of companies and service providers. Ad buying can take place directly between marketers and publishers, but usually involves different services depending on the advertising target or the advertising campaign.

The revenue stream does not necessarily follow a determined route over all different entities involved. For example, advertisers can run campaigns with agencies or can buy advertising inventory directly in ad networks. The possibilities are numerous, which leads to very complex market mechanisms.
**TRENDS IN DIGITAL ADVERTISING (1/3)**

**Technology is a key driver; shift from Programmatic Buying to Programmatic Advertising**

**Processing power and mobile bandwidth**

Technology is continuing to develop very fast. Processors are getting faster, displays are becoming higher resolution and connection speeds are increasing. The global average internet connection speed tripled within the last five years.

These developments had a significant impact on the Digital Advertising market. Modern devices, be they desktop or mobile, allow complex ads like videos or rich media formats to be displayed.

The topic mobile bandwidth in particular has to be discussed. Current 4G connections already allow publishers to display data intensive ads. Future 5G connections however will be up to 100 times faster than today's fourth generation of mobile telecommunications technology. This speed will not only allow video ads on mobile devices to be displayed without any restrictions, but also will change the entire approach of data collection and data exchange.

**Programmatic advertising**

We are noticing even faster and more comprehensive development in the field of specific software solutions.

Buzzwords like programmatic advertising including (re-)targeting and real time bidding have been discussed often recently. Nevertheless we believe that this development is still at its beginning and will have noticeable effects on the advertising market in general and the Digital Advertising market in particular.

Programmatic advertising describes the software-based buying of advertising space based on audience data to target certain potential customers. The recipient of the ad is known before the ad is sold. Therefore the ad can be even more personalized. This process takes place within a split second.

We expect that this targeting will increasingly precise and the average revenue per user will increase accordingly.
TRENDS IN DIGITAL ADVERTISING (2/3)

Ad blocking with negative influence; advertising in messenger apps will drive Social Media Advertising

Ad blocking

Ad blocking or ad filtering is the removal of advertising content on websites with the help of additional software or browser extensions available for desktop and mobile. Ad blocking software is able to avoid data tracking and the collection of user data, block banners, pop-ups and video ads - even on social media services or video players.

Unobtrusive ads are not necessarily blocked although “unobtrusive” is broadly defined. Despite this the blocking of any kind of advertisement is usually always possible.

We believe that advertisers and publishers have to find ways to make ads more attractive to the audience. Advertising has to give some kind of added value to internet users. Less but more effective advertising and more need-based ads may help.

This might be a chicken-and-egg issue, but more precisely targeted advertising could be a leverage point.

Messaging services

A look at the current social media network landscape shows a trend towards mobile social networks like Instagram or Snapchat, whose usability concentrates on mobile devices. The whole design of Snapchat, for instance, is made for vertical screens.

Messenger applications like Whatsapp or Facebook Messenger must also be considered as mobile social networks. No relevant messenger, except We Chat in China, is monetized as of yet. We expect that these have a huge impact on the market and will strongly drive the mobile revenue once they are monetized.

Whatsapp and Facebook Messenger have about 1 billion users and therefore huge potential. To link the mobile growth of Social Media Advertising just to Whatsapp and Facebook Messenger does not go far enough. How advertisements in messengers could work is unclear but even chatbots are conceivable.
TRENDS IN DIGITAL ADVERTISING (3/3)

Beacon technology: advertising on a micro-location scale allows targeting consumers at the point of sale

Location-based advertising

Advertising is already taking advantage of the customer’s location to provide location-specific advertisements like specific search results based on IP addresses. Nevertheless, we see big potential for location-based advertising to drive the mobile advertising market.

It is, for instance, conceivable that GPS units in smartphones provide individual consumer locations very precisely, which triggers corresponding ads. These ads can range from typical ads to very specific push notifications.

In contrast to GPS, the so-called beacon technology allows the localization of customers on a micro-location scale even in closed buildings like supermarkets or other brick and mortar stores.

Beacons allow targeting a consumer at the point of sale and the most opportune moment. Therefore, they are especially suitable for the retail sales front because shelves and store displays can become interactive and personalized.

Native Advertising and influencer marketing

Native advertising matches the form and function of the environment in which it appears. Usually these native ads manifest as articles in the form and style which is similar to content provided by the regular platform's editorial staff.

This format works very well on smaller displays and is ideally suited for advertisements on mobile devices. The proximity to editorial contributions is increasing the consumer engagement and the acceptance of the ads.

Influencer marketing, however, takes advantage of the reach, usually in social networks, of key individuals that endorse a certain product, service or brand. It is a very good way to establish credibility in the market and to reach very specific target groups.

This kind of advertising is mostly not bound to certain formats, as influencers are not bound to formats either, which makes it difficult to consider influencer marketing as Digital Advertising.
DIGITAL ADVERTISING:
BANNER
Overview

Subject

Digital Advertising Overview...........................................3

Banner Advertising.............................................................12

› Customer benefit, Market size, Future developments
› Market KPI comparison by region in charts and tables
› Key Takeaways
› Driving Forces and future outlook

Social Media Advertising ....................................................22

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Essentials

Allows huge range of different formats
Leading role of the USA
Technology driven – high potential in programmatic advertising

Biggest market was the US with US$20 billion in 2016
Europe has the highest average growth rate of 12%

Deep Dive:
Demand side vs. supply side
CPM vs. eCPM
DIGITAL ADVERTISING MARKET

Market Focus: Banner Advertising
BANNER ADVERTISING ALLOWS A HUGE RANGE OF DIFFERENT FORMATS - US IS LEADING

Customer benefit

Banner advertising is one of the most common forms of Digital Advertising. Banners come in various shapes, sizes and formats and are displayed on a website accessed via desktop PCs, on a mobile-enabled website or in an app.

State of the art Banner Advertising allows a huge range of different formats from small text-based ads to complex animated banners.

Typical formats are skyscrapers, wallpapers, interstitials or pop-ups, which usually link to a landing-page of the advertiser.

In addition to these static banners so-called rich media banners allow playing sounds, animations or videos. Videos to be played instead of a static banner outside of a certain video player are considered as rich media. The deciding criterion is not the moving image itself, but if it is in-pager or in-stream.

As in all Digital Advertising markets, our research focus is on the ad spending from advertisers and marketers at the beginning of the value chain.

Banner Advertising offers several different approaches nowadays. Advertisers can choose between private marketplaces where advertisers can select and buy ads from premium publishers or totally automated buying processes.

Private marketplaces usually can be found within specialized ad networks or premium publishers sell their inventory directly.

Automated buying processes, better known as programmatic buying, allow need-based and targeted ad purchases.

The processes of programmatic buying usually take place in so-called ad exchanges with the help of several tech providers.

Market size

The global Banner Advertising market size was about US$43.5 billion in 2016 and had a share of 22% of the Digital Advertising market.

With this share Banner Advertising was the second biggest market in Digital Advertising behind Search Advertising.

The United States, Europe and China covered 81.4% of the global Banner Advertising market with an accumulated revenue of US$35 billion.

Again, the US has been taken advantage of its pioneering role in the digital ecosystem and therefore it is the dominating market with a volume of US$19.6 billion. US based Google Adsense, for instance, is currently one of the oldest and largest ad networks in Digital Advertising.

Additionally, this pioneering role led to the fact that the mobile share of the Banner Advertising market in the US was, with 53.2%, already relatively high.

The European market had a Banner Advertising market volume of US$ 8 billion in 2016 and was slightly bigger than the market in China, which was, with about US$7.8 billion in 2016, the smallest of the regions covered in this report accordingly.

As in other segments of Digital Advertising, the relatively small market in Europe was caused by a very small mobile share of 17% of total revenue due to a very diverse market and very small mobile shares in some countries such as Spain or Poland.

The reasons for these circumstances can be found in a more reluctant approach of European advertisers and consumers. Noticeable smaller smartphone penetrations in some European countries indicate this issue.

The mobile share of the total revenue in China was 55.8% and the highest of all three regions.
FAST MOBILE GROWTH IN EUROPE – NEGATIVE GROWTH OF DESKTOP IN CHINA

Future developments

We expect that Banner Advertising is growing with an average annual growth rate of 9.9% to 2021 to reach a total market size of USD$69.8 billion.

The fastest growing region is Europe with 11.5% CAGR to 2021 due to the fast development of mobile revenue with 30.8% CAGR to 2021. Nevertheless, the mobile share of Banner Advertising revenue will not overtake desktop by 2021. Europe is the only region with a positive growth of desktop revenue, even though it is relatively small with an average of 4% p.a. The expected market size in Europe is USD$13.9 billion in 2021. The mobile share will be 43%.

We observe negative growth rates for desktop revenue in Banner Advertising in the US and in China, but mobile is compensating missing desktop revenues.

Chinese desktop revenue is shrinking rapidly with an average annual growth rate of -18.3% to 2021 and mobile revenue is growing with 19.8% p.a.. China is expected to be the smallest market compared with USD$12 billion in 2021. The mobile share, however, will be the highest with 89.6%.

The development in the US is much more moderate. On one hand desktop revenue is declining slightly with -1.7% CAGR to 2021. On the other hand mobile is growing with 12.9% CAGR in the same time frame.

Again, the US market will meet the expectations of its leading role with a total of USD$27.4 billion and a mobile share of 69.2%.

The whole development of Banner Advertising can only be driven by an increasing average revenue per user, as the user base is already opened up to the greatest possible extent. Higher average revenues cannot be reached by just displaying more ads; we think that a technological development, will increase the market.

Assumptions and sensitivity

We have two key assumptions for the development of Banner Advertising.

On one hand we surmise a general shift in the user behavior towards internet consumption with mobile devices. More powerful devices, smartphone adoption rates and developing connection speeds are indicators for this development.

On the other hand we are expecting increasing prices according to the development of technologies.

The keyword in advertising technology nowadays is programmatic buying which can be already seen as mainstream. But the area of programmatic advertising is continually expanding and becoming increasingly advanced.

We assume a development towards programmatic advertising, where data will influence even the creation process of an ad.

A replacement of Flash with HTML5, which allows more complex advertising especially on mobile devices, will help to accelerate this process. Mobile only formats, location-based advertising or targeted native ads are imaginable here.

Better targeted and more attractive ads will not only gain higher revenues, but will also help to reduce the usage of ad blockers.

Ad blockers are a serious threat for the expected growth of the Digital Advertising market and the Banner Advertising market in particular. The quality of advertising has to improve in order to avert further damage of Banner Advertising revenues.

These assumptions apply for all regions, although the outstanding role of mobile in China and all related issues make mobile very receptive for improvements, which leads to the very high mobile share in China in 2021.

1: CAGR: Compound Annual Growth Rate/ average growth rate per year.
**BANNER ADVERTISING IN MAJOR REGIONS**

### Market KPI comparison by region

#### Revenue forecast

**United States**
- **Desktop:** 19,554 → 27,472
- **Mobile:** 10,399 → 19,085

**China**
- **Desktop:** 7,779 → 11,962
- **Mobile:** 3,440 → 10,710

**Europe**
- **Desktop:** 8,032 → 13,863
- **Mobile:** 6,469 → 7,871

**Revenue per Internet user**

**United States**
- 2016: 34.6 US$ (39.3 US$)
- 2021: 29.3 US$ (66.6 US$)

**China**
- 2016: 4.1 US$ (5.2 US$)
- 2021: 1.2 US$ (9.9 US$)

**Europe**
- 2016: 13.6 US$ (3.3 US$)
- 2021: 15.4 US$ (11.8 US$)

*Source: Digital Market Outlook 2016*
# Market KPI comparison by region

## Revenue

<table>
<thead>
<tr>
<th>Segment</th>
<th>Unit</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>CAGR 16 – 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>mUS$</td>
<td>19,554</td>
<td>21,655</td>
<td>23,406</td>
<td>24,998</td>
<td>26,414</td>
<td>27,472</td>
<td>+7.0%</td>
</tr>
<tr>
<td>Mobile</td>
<td>mUS$</td>
<td>10,399</td>
<td>12,684</td>
<td>14,569</td>
<td>16,276</td>
<td>17,780</td>
<td>19,085</td>
<td>+12.9%</td>
</tr>
<tr>
<td>Desktop</td>
<td>mUS$</td>
<td>9,155</td>
<td>8,971</td>
<td>8,837</td>
<td>8,722</td>
<td>8,635</td>
<td>8,388</td>
<td>-1.7%</td>
</tr>
</tbody>
</table>

## Internet users

<table>
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<tr>
<th>Segment</th>
<th>Unit</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>CAGR 16 – 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>m</td>
<td>265</td>
<td>270</td>
<td>275</td>
<td>280</td>
<td>284</td>
<td>286</td>
<td>+1.6%</td>
</tr>
</tbody>
</table>

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1: CAGR: Compound Annual Growth Rate/ average growth rate per year.
Source: Digital Market Outlook 2016
## KEY ASSUMPTIONS BY REGION

### Market sizing subjects for Banner Advertising forecast

<table>
<thead>
<tr>
<th>Region</th>
<th>Market size</th>
<th>Growth rate</th>
<th>Trend signals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td>▶ Similar to other segments in the Digital Advertising market, the USA has a leading role in Banner Advertising</td>
<td>▶ Still growing with a CAGR(^1) of 7.0% although it is a pioneer market</td>
<td>▶ Rich media banners allow more complex advertising and a higher ARPU(^2) especially on mobile devices</td>
</tr>
<tr>
<td></td>
<td>▶ Biggest market globally with US$19.6 in 2016</td>
<td>▶ Key driver is mobile Banner Advertisement</td>
<td>▶ Targeting and programmatic buying will develop</td>
</tr>
<tr>
<td></td>
<td>▶ Mobile share of the total revenue was 53%</td>
<td>▶ US will keep its leading role with US$27.5 billion in 2021</td>
<td>▶ Ad-Blocker may have negative impact</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Market size</th>
<th>Growth rate</th>
<th>Trend signals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>China</strong></td>
<td>▶ Dominant ad-based or ad-supported content culture</td>
<td>▶ Average growth rate of 9.0%</td>
<td>▶ Technologies, which allow proper Banner Advertising on mobile devices will drive the shift from desktop to mobile</td>
</tr>
<tr>
<td></td>
<td>▶ With a market size of US$7.8 billion slightly smaller than Europe</td>
<td>▶ Shift between desktop and mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▶ Mobile share of the total revenue was 55.8%</td>
<td>▶ Desktop revenue is shrinking rapidly with a CAGR of -18.3% and mobile revenue is growing with 19.8%, due to the outstanding role of mobile</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Market size</th>
<th>Growth rate</th>
<th>Trend signals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Europe</strong></td>
<td>▶ Difficult to compare with other regions, as the market is very diverse</td>
<td>▶ Highest growth with a CAGR of 11.5%, although the Internet user base is settled</td>
<td>▶ A shift from desktop to mobile is unavoidable long-term</td>
</tr>
<tr>
<td></td>
<td>▶ Top 3 European markets (e.g. UK) develop similar to the US</td>
<td>▶ Mobile revenue is growing very rapidly with an average growth rate of 30.8%, but won’t be as high as China or the US in total</td>
<td>▶ Assumptions regarding formats and technologies apply also for Europe</td>
</tr>
<tr>
<td></td>
<td>▶ Only US$1.5 billion mobile revenue because of a hesitation of advertisers regarding mobile especially in eastern Europe</td>
<td></td>
<td>▶ Ad-Blocker may have negative impact too</td>
</tr>
</tbody>
</table>

---

1: CAGR: Compound Annual Growth Rate/ average growth rate per year  
2: ARPU: Average revenue per user  
Source: Digital Market Outlook 2016
## PROGRAMMATIC BUYING

### The split second between sale and display

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.04 sec</td>
<td>The internet user opens the publisher's website in a browser.</td>
</tr>
<tr>
<td>0.08 sec</td>
<td>If no ad is available on the publisher's ad server, the server offers the inventory at an ad exchange.</td>
</tr>
<tr>
<td>0.10 sec</td>
<td>The ad exchange passes the offer to several demand side platforms (DSP).</td>
</tr>
<tr>
<td>0.12 sec</td>
<td>The ad exchange sends user and inventory data to the DSPs.</td>
</tr>
<tr>
<td>0.13 sec</td>
<td>The DSPs match this data with advertiser requirements such as targeting or budgets.</td>
</tr>
<tr>
<td>0.14 sec</td>
<td>Each DSP sets an optimal bid for the advertiser and responds to the ad exchange.</td>
</tr>
<tr>
<td>0.18 sec</td>
<td>Ad exchange selects the winning bid in a second price auction from all DSP responses.</td>
</tr>
<tr>
<td>0.19 sec</td>
<td>Ad exchange sends price and ad to publisher's ad server.</td>
</tr>
<tr>
<td>0.23 sec</td>
<td>Publisher's ad server tells browser where to display the ad.</td>
</tr>
<tr>
<td>0.31 sec</td>
<td>Advertiser's ad server sends ad to the browser.</td>
</tr>
<tr>
<td>0.36 sec</td>
<td>Browser displays website including the banner.</td>
</tr>
</tbody>
</table>

Source: Modelled after Turn Inc.
Pricing Differences between Direct Ad Buying and Programmatic Buying

**Direct buying**

A common pricing model within ad networks or for self-publishers is the so-called cost per mille (CPM). Advertisers buy advertising inventory and pay a certain price for one thousand advertising impressions. Although this advertising inventory is often of good quality, targeting options are limited.

**Real-time bidding**

The usual pricing method within the metrics of programmatic buying is the effective CPM (eCPM), which pays for each impression according to the highest bid. eCPMs are often lower than CPMs nowadays, but we assume a noticeable increase as soon as ads can be created for individual users automatically.

1: Dots just have an illustrative character and do not equal necessarily one ad impression.
DIGITAL ADVERTISING:
SOCIAL MEDIA
Overview

Subject

Digital Advertising Overview

Banner Advertising

Social Media Advertising

Video Advertising

Search Advertising

Online Classifieds

Definitions, About, Imprint

Essentials

Social Media Advertising allows precise and individual customer approach

Mobile revenue share is growing

Biggest market was the US with US$15 billion in 2016

China has the highest average growth rate of 24% and will overtake Europe within the next years

Facebook is currently the biggest social network worldwide with 1.09 billion daily and 1.65 billion monthly active users
DIGITAL ADVERTISING MARKET

Market focus: Social Media Advertising
PRECISE AD TARGETING AS KEY BENEFIT – US MARKET IS IN LEADING POSITION

Customer benefit

To understand the benefits of Social Media Advertising it is important to understand the mechanics of social media networks.

The key elements of social media beside its networking aspects are communication and interaction with other participants. Social media networks usually contain at least one of the following opportunities for action: The contribution of user generated content, comments on postings, sharing the contribution of others or direct communication with other members.

The interaction causes high involvement and personal recommendations gain immediate social proof.

Social networks usually work with newsfeeds where content and shared information are shown by relevance or in chronological order. These newsfeeds are the leverage point for Social Media Advertising.

We define Social Media Advertising as all ad spending to reach consumers within social networks or business networks. Ads in social networks can appear as sponsored posts within organic content or besides the newsfeed.

“The effects of the Cara Delevingne campaign on Facebook would not have been possible with programmatic advertising.”

Jérôme Chochet, SVP Sales Zalando, 2016

Most social media networks allow advertisers very precise ad targeting. Ads can be displayed in specific areas, based on demographic data, user interests or even on the general user behavior within the network.

Spreading losses can be avoided as far as possible. In view of a direct customer approach, Social Media Advertising is even more powerful than established formats like television.

Market size

The global Social Media Advertising market size was about US$26.4 billion in 2016 and accounted for 13% of the total Digital Advertising market.

With a cumulated amount of US$22.8 billion, the US, China and Europe covered 86% of the global Social Media Advertising market.

The US market has been by far the leading market in Social Media Advertising and generated revenues of about US$15 billion in 2016. That was a 19% share of the total US Digital Advertising market.

The market in Europe was with about US$5 billion in 2016 not even half the size of the US market. Following this, the share was only 12% of the whole European Digital Advertising market.

In China this share was even lower. 8% of the Digital Advertising revenue came from social media. Expressed in absolute figures, Social Media Advertising generated US$3.7bn in 2016 in China.

A closer look on mobile and desktop shares confirms the leading role of the US market.

The mobile Social Media Advertising revenue in the US was with about US$11 billion more than two and half times higher than the corresponding desktop revenue (US$3.6 billion).

Mobile revenue shares in China and Europe were balanced and with 59% significantly smaller than the US.

Summary

The US market was by far the biggest of all three markets considered. With US$15 billion in 2016 it was bigger than Europe and China together.

The US have also a leading position in mobile Social Media Advertising.
MOBILE IS GROWING FAST –
DESKTOP IS STAGNATING OR EVEN DECLINING

Future developments

The strong mobile Social Media Advertising market in the US indicates the future development of the global market.

We believe that the mobile revenue share is strongly growing over all regions.

The mobile share of global Social Media Advertising will be 81% in 2021.

A look at the current social media network landscape shows a trend towards mobile social networks like Instagram or Snapchat, whose usability concentrates on mobile devices. The whole design of Snapchat, for instance, is made for vertical screens. While Instagram is monetized moderately at the moment, Snapchat does not record any appreciable turnover yet.

Messenger applications like Whatsapp or Facebook Messenger must also be considered as mobile social networks.

No relevant messenger, except We Chat in China, is monetized yet. We expect that these kind of social networks have huge impact on the market and will drive the mobile revenue strongly once they are monetized.

Whatsapp and Facebook Messenger have about 1 billion respectively 0.9 billion users. Therefore the mobile Social Media Advertising revenue in the US, which is already high, is still growing to a share of 82% and US$20 billion is expected in 2021.

The mobile share in Europe is also growing with the same rate as the US with 12% CAGR¹ to reach a mobile share of 73% in 2021.

China will reach this share already in 2019. We expect an above average growth of mobile social media advertising in China with 35% CAGR to 2021. The mobile share will be 92% of the total.

Assumptions and sensitivity

Social Media Advertising includes all advertising revenue generated by social networks.

Some Chinese social media services allow users to customize their profile pages with paid content. The Chinese network Qzone, for example, can be individualized with so-called Qzone accessories, which are not free. Revenue generated by these kind of services are not considered as Social Media Advertising revenue.

First of all, we are expecting a constant growth of the social media user base. One of our key assumptions on this point is a general shift from desktop to mobile. Quick growth of mobile device penetration over all regions points to this assumption.

People usually spend more time on mobile than on desktop. Therefore we assume a higher average revenue per user for mobile advertisements.

Another factor for a higher revenue per user is a format shift towards more complex formats like video, which can already be realized with the current smartphone generation.

These issues are the key drivers for the fast development of the mobile revenue.

The advantages of mobile in this context make us believe that messaging services, which mostly do not include advertising at the moment, will be advertised in the near future.

Even if this monetization is very moderate, we assume a significant impact solely due to the large user base these services already have.

Besides a revenue potential itself, an integration of social media networks, messaging services with other services like commerce or payment, could lead to a higher user engagement and even more advanced user profiling.

1: CAGR: Compound Annual Growth Rate/ average growth rate per year.
SOCIAL MEDIA ADVERTISING IN MAJOR REGIONS

Market KPI comparison by region

Revenue forecast

in million US$ by region

United States

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop</td>
<td>14,818</td>
<td>24,835</td>
</tr>
<tr>
<td>Mobile</td>
<td>11,196</td>
<td>20,437</td>
</tr>
</tbody>
</table>

+10.9% p.a.

China

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop</td>
<td>1,469</td>
<td>3,680</td>
</tr>
<tr>
<td>Mobile</td>
<td>2,211</td>
<td>9,766</td>
</tr>
</tbody>
</table>

+23.7% p.a.

Europe

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop</td>
<td>2,945</td>
<td>5,001</td>
</tr>
<tr>
<td>Mobile</td>
<td>2,056</td>
<td>4,936</td>
</tr>
</tbody>
</table>

+7.0% p.a.

Revenue per Internet user

in US$ by region

United States

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.7</td>
<td>15.4</td>
<td></td>
</tr>
<tr>
<td>42.3</td>
<td>71.3</td>
<td></td>
</tr>
</tbody>
</table>

China

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>2.6</td>
<td>9.1</td>
<td></td>
</tr>
</tbody>
</table>

Europe

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>6.2</td>
<td>9.7</td>
<td></td>
</tr>
</tbody>
</table>

Source: Digital Market Outlook 2016
### Social Media Advertising in Major Regions

#### Market KPI comparison by region

**Revenue**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>m US$</td>
<td>14,818</td>
<td>17,814</td>
<td>20,220</td>
<td>22,133</td>
<td>23,645</td>
<td>24,835</td>
<td>3,680</td>
<td>4,902</td>
<td>6,331</td>
<td>7,828</td>
<td>9,285</td>
<td>10,638</td>
<td>5,001</td>
<td>5,411</td>
<td>5,796</td>
<td>6,221</td>
<td>6,597</td>
<td>7,002</td>
<td>514.5</td>
<td>546.9</td>
<td>579.9</td>
<td>613.4</td>
<td>646.7</td>
<td>679.2</td>
<td>332.3</td>
<td>342.9</td>
<td>351.5</td>
</tr>
<tr>
<td>Mobile</td>
<td>m US$</td>
<td>11,196</td>
<td>13,862</td>
<td>16,090</td>
<td>17,891</td>
<td>19,317</td>
<td>20,437</td>
<td>2,211</td>
<td>3,616</td>
<td>5,190</td>
<td>6,800</td>
<td>8,346</td>
<td>9,766</td>
<td>2,945</td>
<td>3,332</td>
<td>3,720</td>
<td>4,112</td>
<td>4,509</td>
<td>4,936</td>
<td>2,056</td>
<td>2,080</td>
<td>2,075</td>
<td>2,109</td>
<td>2,088</td>
<td>2,066</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desktop</td>
<td>m US$</td>
<td>3,622</td>
<td>3,952</td>
<td>4,130</td>
<td>4,242</td>
<td>4,327</td>
<td>4,398</td>
<td>1,469</td>
<td>1,286</td>
<td>1,141</td>
<td>1,028</td>
<td>940</td>
<td>872</td>
<td>2,056</td>
<td>2,080</td>
<td>2,075</td>
<td>2,109</td>
<td>2,088</td>
<td>2,066</td>
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<td></td>
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</table>

**Social media users**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>m</td>
<td>195.7</td>
<td>200.9</td>
<td>205.6</td>
<td>209.7</td>
<td>213.5</td>
<td>216.9</td>
<td>514.5</td>
<td>546.9</td>
<td>579.9</td>
<td>613.4</td>
<td>646.7</td>
<td>679.2</td>
<td>332.3</td>
<td>342.9</td>
<td>351.5</td>
<td>358.3</td>
<td>363.5</td>
</tr>
</tbody>
</table>

1: CAGR: Compound Annual Growth Rate/average growth rate per year.

Source: Digital Market Outlook 2016
# Key Assumptions by Region

## Market Sizing Subjects for Social Media Advertising Forecast

<table>
<thead>
<tr>
<th>Region</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td></td>
</tr>
<tr>
<td>Market size</td>
<td>Pioneer market with at least 3 years lead, hosting relevant social networks</td>
</tr>
<tr>
<td></td>
<td>Corresponding to this the biggest market globally with US$14.2 billion in 2016</td>
</tr>
<tr>
<td></td>
<td>Highest mobile share of total revenue with 75.6%</td>
</tr>
<tr>
<td>Growth rate</td>
<td>Still growing with a CAGR(^1) of 10.9% although it is a pioneer market</td>
</tr>
<tr>
<td></td>
<td>Highest mobile share will be still growing (12.8% CAGR) due to messaging services and other mobile focused services</td>
</tr>
<tr>
<td></td>
<td>Desktop revenue is growing moderately (4% CAGR)</td>
</tr>
<tr>
<td>Trend signals</td>
<td>Integration of commerce solutions (Buy Buttons), P2P Payments, better localization etc. will increase user engagement, conversions and allow advanced targeting</td>
</tr>
<tr>
<td></td>
<td>We do not expect significant impact of Virtual Reality in the short-term, whereas Augmented Reality might gain early traction</td>
</tr>
<tr>
<td><strong>China</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Early stage of Social Media Advertising with a revenue of US$3.6 billion in 2016</td>
</tr>
<tr>
<td></td>
<td>Despite China’s status as mobile first country relatively low mobile share of total revenue (60%)</td>
</tr>
<tr>
<td></td>
<td>Small average revenue per user is hampering the growth</td>
</tr>
<tr>
<td></td>
<td>Highest average growth rate of 23.7% due to significant growth ARPU(^2) and user base</td>
</tr>
<tr>
<td></td>
<td>Highest growth rate of 34.6% for mobile revenue</td>
</tr>
<tr>
<td></td>
<td>Desktop revenue is declining rapidly</td>
</tr>
<tr>
<td></td>
<td>Wide social media landscape may consolidate by 2021</td>
</tr>
<tr>
<td></td>
<td>Highest user growth rate of 5.7%. There will be more than three times more social media users in China than in the USA in 2021</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>With market size of US$5 billion in 2016 on a similar level as China</td>
</tr>
<tr>
<td></td>
<td>Mobile share of total revenue was with 62% slightly higher than in China</td>
</tr>
<tr>
<td></td>
<td>The European market is very diverse. The granularity and language barriers are limiting the growth</td>
</tr>
<tr>
<td></td>
<td>A reluctant attitude of European users and advertisers lead to relatively small growth with a CAGR of 7.5%</td>
</tr>
<tr>
<td></td>
<td>Desktop revenue is stagnating, while mobile revenue is growing with a CAGR of 12%</td>
</tr>
<tr>
<td></td>
<td>More conservative approach of users and advertisers persists</td>
</tr>
<tr>
<td></td>
<td>Following this, the desktop share will still be relatively high in 2021 (27%)</td>
</tr>
<tr>
<td></td>
<td>Nevertheless, customer behavior must be kept in view</td>
</tr>
</tbody>
</table>

---

\(^1\): CAGR: Compound Annual Growth Rate/average growth rate per year  
\(^2\): ARPU: Average revenue per user  
Source: Digital Market Outlook 2016
## Selected Key Players in Social Media

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Company</th>
<th>Relevant Regions</th>
<th>User (in mn)</th>
<th>Ads?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>Leading social network service with a generalist approach.</td>
<td>Facebook Inc.</td>
<td>United States, Europe</td>
<td>1,650 (1Q2016)</td>
<td>Yes</td>
</tr>
<tr>
<td>Whatsapp</td>
<td>Mobile messaging service without noteworthy additional features.</td>
<td>Facebook Inc.</td>
<td>United States, Europe</td>
<td>1,000 (Feb 2016)</td>
<td>Not yet</td>
</tr>
<tr>
<td>Messenger</td>
<td>Facebook’s mobile messaging service. Replaced the chat function.</td>
<td>Facebook Inc.</td>
<td>United States, Europe</td>
<td>900 (Apr 2016)</td>
<td>Not yet</td>
</tr>
<tr>
<td>WeChat</td>
<td>Messaging service with an all-in-one approach. Profiles, Payment etc.</td>
<td>Tencent Inc.</td>
<td>China</td>
<td>760 (1Q2016)</td>
<td>Yes</td>
</tr>
<tr>
<td>Q-Zone</td>
<td>Social network with usual functions and customizable profile pages.</td>
<td>Tencent, Inc.</td>
<td>China</td>
<td>650 (1Q2016)</td>
<td>Yes</td>
</tr>
<tr>
<td>Instagram</td>
<td>Mobile photo- and video-sharing network.</td>
<td>Facebook Inc.</td>
<td>United States, Europe</td>
<td>500 (June 2016)</td>
<td>Yes</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>Business-oriented service for professional networking.</td>
<td>LinkedIn</td>
<td>United States, (Europe)</td>
<td>433 (1Q2016)</td>
<td>Yes</td>
</tr>
<tr>
<td>Twitter</td>
<td>Microblogging service that allow “tweets” limited to 140 characters.</td>
<td>Twitter Inc.</td>
<td>United States, Europe</td>
<td>310 (1Q2016)</td>
<td>Yes</td>
</tr>
<tr>
<td>Weibo</td>
<td>Microblogging service in the style of Twitter.</td>
<td>Weibo Corp.</td>
<td>China</td>
<td>236 (Dec 2015)</td>
<td>Yes</td>
</tr>
<tr>
<td>Pinterest</td>
<td>Mobile photo- and video-sharing network.</td>
<td>Pinterest Inc.</td>
<td>United States, Europe</td>
<td>100 (Sep 2015)</td>
<td>Yes</td>
</tr>
<tr>
<td>VK</td>
<td>Similar to Facebook. Small worldwide user base, but dominating in Russia.</td>
<td>Mail.Ru Group</td>
<td>Europe (esp Russia)</td>
<td>87 (Dec 2015)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1: Monthly active user  
2: Registered user  
Source: Company Information
BEST PRACTICE: FACEBOOK

Company profile

Footprint

Overview

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Advertising Revenue</td>
<td>US$17.08 billion</td>
<td>2015</td>
</tr>
<tr>
<td>Daily Active Users</td>
<td>1.09 billion</td>
<td>March 2016</td>
</tr>
<tr>
<td>Mobile Daily Active Users</td>
<td>0.99 billion</td>
<td>March 2016</td>
</tr>
<tr>
<td>Growth (MAUs)</td>
<td>14.2% YoY</td>
<td>2015</td>
</tr>
<tr>
<td>Growth (Revenue)</td>
<td>43.8% YoY</td>
<td>2015</td>
</tr>
<tr>
<td>founded</td>
<td>2004</td>
<td></td>
</tr>
</tbody>
</table>

Background

Facebook is the leading social network service based in Menlo Park, California, United States. Facebook is currently the biggest social network worldwide with 1.09 billion daily and 1.65 billion monthly active users. The network is available worldwide, but is blocked in China and North Korea.

Besides Facebook as a network itself, Facebook Inc. acquired several other social networks or messaging services (Instagram, Whatsapp) in the recent past. Another noteworthy acquisition is Oculus VR, LLC. Oculus is a virtual reality technology company with a focus on hardware at the moment.

Analyst opinion

Facebook succeeded in monetizing their core business with advertising. However, the implementation of advertising on mobile has to be understood as a breakthrough. We can still see high growth rates although Facebook's mobile messaging services with up to 1 billion users have no advertising on it yet. These services and the constant development of existing formats promise a huge potential for future growth of Facebook.

In contrast to that, the impact of Oculus and Virtual Reality on the advertising market is questionable and depends on how a conversion into Social-VR turns out.

Source: Digital Market Outlook 2016, company information, Crunchbase
RISING STAR: SNAPCHAT

Company profile

Daily Active Users (in million)

<table>
<thead>
<tr>
<th></th>
<th>June 14</th>
<th>June 15</th>
<th>June 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>59</td>
<td>89</td>
<td>150</td>
</tr>
</tbody>
</table>

Overview

- **Full Name:** Snapchat Inc.
- **Headquarters:** Pacific Palisades (CA)
- **Daily Active Users:** 150 million (June 2016)
- **Funding:** US$2.65bn (2016)
- **Founded:** 2011

Background

Snapchat is a photo messaging app that allows users to send photos or videos to recipients (Snaps). It differs in offering various image editing tools and an auto-delete function.

Besides the messaging function, Snapchat added a significant new feature called “Stories” in October 2013, which allows users to put together single Snaps in a narrative way. Theses stories are available for twenty-four hours after being posted and are public to all followers.

According to company information Snapchat has over 100 million daily active users and reaches 41% of all 18 to 34 year-olds in the US.

Analyst opinion

Functionality and formats - like vertical videos, augmented reality inspired lay overs or filters - are very suitable for mobile advertising.

Advertising market once monetized properly.

Although a reach of 41% of all 18 to 34 year-olds in the US sounds impressive and very interesting for advertisers at first glance, the overall size of this target group could possibly affect the user development and limit it to this amount.
DIGITAL ADVERTISING: VIDEO
Overview

Subject

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- Market KPI comparison by region in charts and tables
- Key Takeaways
- Driving Forces and future outlook

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Online Classifieds .............................................................. 53

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Essentials

- Attractiveness of using video advertising is gaining, because of professional content
- Fastest growing segment within Digital Advertising

- Biggest market was the US with US$9.5 billion in 2016
- China has the highest average growth rate of 24%

- Deep dive:
  - Demand side vs. supply side
  - Market structure

- YouTube has over 1 bn monthly users in 88 countries
DIGITAL ADVERTISING MARKET

Market focus: Video Advertising
Customer benefit

Video Advertising considers all ad formats within web- or app-based video players.

These formats are typically video ads that appear before, during or after the streamed video (pre-roll, mid-roll, post-roll video ads). In addition to these video ads text- or image-based overlays that appear while watching a video are also categorized as Video Advertising.

Video Advertising has to be distinguished from rich media advertising formats, which are considered as Banner Advertising even though they can include moving images. The deciding criterion is not the moving image, but a connection to video content.

Our research focus is on the ad spending from advertisers and marketers at the beginning of the value chain.

After a Web 2.0 and Social Media driven development of user-generated videos, we observe a steady professionalization of video content.

On one hand it allows content creators and license holders to offer premium video content free of charge, as content can refinance itself through advertising.

On the other hand using Video Advertising is gaining attractiveness, because of the professionalization of video content.

As this win-win game works well we can note, that catch-up TV portals, media libraries of local TV station, video players on leading news sites etc. are becoming increasingly relevant besides well known video portals like YouTube or Dailymotion.

Furthermore this format allows advertisers to deliver their messages with the same depth advertisers are used to from TV, but with much more targeting options, as the online format is no one-way street and audience data can be used.

Market size

The global Video Advertising market size was about US$21 billion in 2016 and accounted for 10.5% of the Digital Advertising market.

Video Advertising revenue was smaller than for example Banner Advertising as Video Advertising inventory has been much rarer.

The three regions covered in this report had an accumulated revenue of US$17.5 billion and covered 83.7% of the global Video Advertising market in 2016.

The US market was the biggest in Video Advertising and with a market volume of US$9.5 billion in 2016 about the size of Europe and China combined.

The domination of the USA can be explained by the fact that this market takes a pioneering role. Leading global players like YouTube are based here and started their business in the USA.

In this context the outstanding position of YouTube has to be mentioned. According to company information YouTube reaches more 18-34 and 18-49 year-olds than any cable network in the U.S.

The market in Europe was the smallest of all regions covered in this report with about US$3.4 billion in 2016. While the US market accounted for 46% of the global market, the whole European had a share of 16%.

The Chinese market had a Video Advertising market volume of US$4.7bn in 2016 and is already bigger than the European market.

A closer consideration of mobile and desktop shares shows a rather reluctant approach of European advertisers as well as consumers.

The mobile share of Video Advertising in Europe was only 32.3%, while mobile shares in China and the US were with 53.7% and 51.7% respectively, already at a similarly high level.


**FAST MOBILE GROWTH IN CHINA – CONSERVATIVE APPROACH IN EUROPE**

**Future developments**

Video Advertising has the highest growth rate within the whole Digital Advertising market. We expect an average annual growth rate of 17% and a total market size of US$45.5 billion in 2021.

Although Video Advertising is not necessarily driven by a development towards mobile in the same way as other segments, we expect a mobile share of the global market of 64%.

**China** will be most responsible for the future share of mobile through above average development of mobile with a CAGR\(^1\) of 30.5% to 2021. This significantly high growth rate leads to the fact that China is the fastest growing market of all three regions with an overall average annual growth rate of 18.7%, and a total market volume of about US$11 billion.

This development in China is supported by a generally positive attitude towards ad-based and ad-supported content.

A similar but slightly weaker development can be observed in the **US**. Although it is a pioneering market it is still growing with a CAGR\(^1\) of 12.1% to 2021, and will still be in a leading position with US$16.8 billion in total. The mobile share will grow to 62.6% with 16.5% CAGR to 2021.

The situation in **Europe** is different. The market diversity in particular means that Europe will remain the smallest market compared with US$7.5 billion. The mobile share will be 51.6%.

The **main driver of future developments is technology**. 5G connections will be up to 100 times faster than today's mobile telecommunications technologies. These developments will allow complex video ads to be displayed.

Increasing processing power and bandwidth allow new formats like live broadcasting, 360° or virtual reality videos that will make this advertising environment increasingly attractive.

**Assumptions and sensitivity**

One of our key assumptions is a general shift from television to online in terms of consumer behavior as well as ad spending.

This shift is basically driven by a constant development of video technologies. These include growing mobile and desktop bandwidth, processing power and new formats, which we already mentioned above, but also a better integration into existing infrastructure.

Technology standard specifications like the IAB Digital Video Ad Serving Template (VAST), which is a universal XML schema for serving ads to video publishers and video players, will open up the digital video advertising marketplace, reducing expensive technical barriers and encouraging advertisers to increase video ad spending.

Contrary to classic television, Video Advertising allows also a need-based and individualized targeting of ads. This major advantage promises positive effects on the average revenue per user and we assume a significant influence on the growth of the global market volume.

Although subscription-based video streaming is not considered as Video Advertising, we have to keep an eye on this market.

That Netflix subscriber growth stalled in the second quarter of 2016 after Netflix raised prices, which suggests a noticeable price sensivity of video users. It is conceivable that currently subscription-based video services offer suitable content refinanced by using advertising in the future.

Therefore we believe that the publisher landscape will widen and more publishers besides the dominating key players like YouTube will have an impact on the market.

---

1: CAGR: Compound Annual Growth Rate/ average growth rate per year.
VIDEO ADVERTISING IN MAJOR REGIONS

Market KPI comparison by region

Revenue forecast

in million US$ by region

<table>
<thead>
<tr>
<th>Region</th>
<th>2016</th>
<th>2021</th>
<th>+12.1% p.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop:</td>
<td>9,516</td>
<td>16,823</td>
<td></td>
</tr>
<tr>
<td>Mobile:</td>
<td>4,616</td>
<td>10,528</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>2016</th>
<th>2021</th>
<th>+18.7% p.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop:</td>
<td>11,026</td>
<td>22.0</td>
<td></td>
</tr>
<tr>
<td>Mobile:</td>
<td>9,857</td>
<td>36.8</td>
<td></td>
</tr>
</tbody>
</table>

Re Revenue per Internet user

in US$ by region

<table>
<thead>
<tr>
<th>Region</th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop:</td>
<td>17.4</td>
<td>22.0</td>
</tr>
<tr>
<td>Mobile:</td>
<td>18.5</td>
<td>36.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop:</td>
<td>2.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Mobile:</td>
<td>3.1</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Source: Digital Market Outlook 2016
## VIDEO ADVERTISING IN MAJOR REGIONS

### Market KPI comparison by region

#### United States

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</thead>
<tbody>
<tr>
<td>Total</td>
<td>mUS$</td>
<td>9,516</td>
<td>11,325</td>
<td>13,029</td>
<td>14,431</td>
<td>15,546</td>
<td>16,823</td>
<td>+12.1 %</td>
<td>4,672</td>
<td>6,024</td>
<td>7,415</td>
<td>8,522</td>
<td>9,836</td>
<td>11,026</td>
<td>+18.7 %</td>
<td>3,380</td>
<td>4,168</td>
<td>5,014</td>
<td>5,886</td>
<td>6,734</td>
<td>7,463</td>
<td>+17.2 %</td>
</tr>
<tr>
<td>Mobile</td>
<td>mUS$</td>
<td>4,900</td>
<td>6,391</td>
<td>7,686</td>
<td>8,723</td>
<td>9,508</td>
<td>10,528</td>
<td>+16.5 %</td>
<td>2,605</td>
<td>4,037</td>
<td>5,786</td>
<td>7,099</td>
<td>8,563</td>
<td>9,857</td>
<td>+30.5 %</td>
<td>1,092</td>
<td>1,545</td>
<td>2,092</td>
<td>2,699</td>
<td>3,317</td>
<td>3,852</td>
<td>+28.7 %</td>
</tr>
<tr>
<td>Desktop</td>
<td>mUS$</td>
<td>4,616</td>
<td>4,935</td>
<td>5,344</td>
<td>5,708</td>
<td>6,038</td>
<td>6,295</td>
<td>+6.4 %</td>
<td>2,066</td>
<td>1,987</td>
<td>1,629</td>
<td>1,423</td>
<td>1,272</td>
<td>1,168</td>
<td>-10.8 %</td>
<td>2,288</td>
<td>2,623</td>
<td>2,922</td>
<td>3,187</td>
<td>3,417</td>
<td>3,612</td>
<td>+9.6 %</td>
</tr>
</tbody>
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#### China

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<tbody>
<tr>
<td>Total</td>
<td>mUS$</td>
<td>265</td>
<td>270</td>
<td>275</td>
<td>280</td>
<td>284</td>
<td>288</td>
<td>+1.7 %</td>
<td>854</td>
<td>890</td>
<td>924</td>
<td>958</td>
<td>989</td>
<td>1016</td>
<td>+3.5 %</td>
<td>493</td>
<td>503</td>
<td>510</td>
<td>517</td>
<td>521</td>
<td>523</td>
<td>+1.2 %</td>
</tr>
</tbody>
</table>

#### Europe

<table>
<thead>
<tr>
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<td>924</td>
<td>958</td>
<td>989</td>
<td>1016</td>
<td>+3.5 %</td>
<td>493</td>
<td>503</td>
<td>510</td>
<td>517</td>
<td>521</td>
<td>523</td>
<td>+1.2 %</td>
</tr>
</tbody>
</table>

1: CAGR: Compound Annual Growth Rate/average growth rate per year.
Source: Digital Market Outlook 2016
KEY ASSUMPTIONS BY REGION

Market sizing subjects for Video Advertising forecast

United States
- Pioneering market with at least 3 years lead, hosting relevant global players
- Biggest market globally with US$9.5bn in 2016
- Average revenue per user very high in comparison to China and Europe
- Mobile share of total revenue was 51.5%
- Still growing with a CAGR\(^1\) of 12.1% although it is a pioneering market
- With US$16.8 billion in 2021 still in a leading position
- Online videos will remain strong on desktop, simply because of screen sizes
- We are expecting a constant development of video technologies and a shift from television to online
- Especially the targeting and individualization of ads with a positive effect on the revenue per user are advantages over classic television

China
- With a market size of US$4.9 billion on a similar level to Europe
- Mobile share of total revenue was with 55.8% the highest in comparison
- Small average revenue per user
- User base is growing with the highest rate (3.5% CAGR 16-21)
- Accordingly highest average growth rate of 18.7% due to significant mobile ARPU growth
- Highest growth rate of 30.5% for mobile revenue
- Technologies, which allow proper Video Advertising on mobile devices will drive the shift from desktop to mobile
- Focus here will be on screen sizes, resolution and connection speed

Europe
- Smallest of the three regions with US$3.4 billion in 2016
- Mobile share of total revenue was relatively low with 32.3%
- Reluctant attitude of European users and advertisers lead to a small mobile share
- Nevertheless mobile revenue is growing with an average growth rate of 28.7%, but won’t overtake desktop by 2020
- More conservative approach of users and advertisers persists
- Nevertheless the assumptions for the US regarding technologies also apply for Europe
- Adoption of US technology standards (e.g. IAB VAST)

1: CAGR: Compound Annual Growth Rate/ average growth rate per year
Source: Digital Market Outlook 2015
## ROLES IN VIDEO ADVERTISING

### Selected representatives by role

<table>
<thead>
<tr>
<th>Role</th>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency</td>
<td>Havas</td>
<td>Havas is a French multinational advertising and public relations agency. The service of advertising agencies includes creating, planning and handling advertising.</td>
</tr>
<tr>
<td>Trading Desk</td>
<td>The Trade Desk</td>
<td>Trade desks do not create advertising, but take care of a certain part of the planning and handling, with a focus on buying advertising inventory.</td>
</tr>
<tr>
<td>DSP</td>
<td>BrightRoll</td>
<td>BrightRoll offers a Demand Side Platform. DSPs bundle the demand of ad buyers and enrich it for example with user data within the context of programmatic advertising.</td>
</tr>
<tr>
<td>Ad network</td>
<td>YuMe</td>
<td>YuMe as an ad network brings publishers and advertisers together. Ad networks usually sell ad space need-based to advertisers with a holistic approach including many roles.</td>
</tr>
<tr>
<td>Ad exchange</td>
<td>SpotXchange</td>
<td>Ad exchanges like SpotXchange work in a similar way to ad networks. Ad exchanges usually sell ad space in real-time auctions in based on data from DSPs, SSPs etc.</td>
</tr>
<tr>
<td>SSP</td>
<td>LiveRail</td>
<td>Supply Side Platforms bundle advertising space. They act as an entrance door into the market for publishers. Many networks and exchanges have their own SSPs.</td>
</tr>
<tr>
<td>Publisher</td>
<td>Youtube</td>
<td>Publishers sell space or time in their video players as inventory for advertising reasons. Here is the place where the audience receives the ads.</td>
</tr>
</tbody>
</table>
# BEST PRACTICE: YOUTUBE

## Company profile

### Availability

<table>
<thead>
<tr>
<th>Employee</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>YouTube</td>
<td>US-based company YouTube, LLC.</td>
</tr>
</tbody>
</table>

YouTube was founded in 2004 and is part of the Google eco-sphere since 2005.

### Facts

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Users</td>
<td>&gt; 1 billion</td>
</tr>
<tr>
<td>Local versions in</td>
<td>88 countries</td>
</tr>
<tr>
<td>Average mobile session</td>
<td>44 min</td>
</tr>
<tr>
<td>Uploads per min</td>
<td>400 hours</td>
</tr>
<tr>
<td>Mobile share</td>
<td>&gt; 50 %</td>
</tr>
<tr>
<td>founded</td>
<td>2005</td>
</tr>
</tbody>
</table>

### Background

YouTube is a video portal of the US-based company YouTube, LLC. It was founded in 2004 and is part of the Google eco-sphere since 2005.

The portal features a wide variety of user generated and corporate media content, including music videos, TV clips and other video content.

The content is free to view and the business model is based on the sale of advertising space.

According to company information YouTube has over a billion users watching hundreds of millions of hours on YouTube and generate billions of views daily.

It is available worldwide, but is blocked in some countries due to government restrictions.

### Analyst opinion

YouTube is a very attractive publisher for video advertisers with an enormous reach of over 1 billion monthly users.

More than half of YouTube views come from mobile devices and the time people spent watching videos on mobile is up 100% YoY while an average mobile session is 44 min long. This suggests a positive development in general video consumption on mobile devices.

We expect live broadcasting to be another important feature for advertising on YouTube in the future.

Furthermore, YouTube is a well suited platform for story telling, influencer marketing and brand-building (see Red Bull campaign).
Overview

Subject

Search Advertising .................................................................43

› Customer benefit, Market size, Future developments
› Market KPI comparison by region in charts and tables
› Key Takeaways
› Driving Forces and future outlook

Essentials

Search as the Internet’s entrance door
Biggest segment within Digital Advertising

Biggest market was the US with US$33 billion in 2016
China has the highest average growth rate of 18%

Google’s global domination
China vs. Europe and the US
DIGITAL ADVERTISING MARKET

Market focus: Search Advertising
**Customer benefit**

Search Advertising (SEA) or Paid-for-search advertising describes advertisements that are displayed on search result pages above or next to organic search results.

Revenues generated through search engine optimization (SEO) are not considered as Search Advertising.

The advertisements are usually text-based, but can be displayed as images where applicable. These ads usually appear as sponsored links or sponsored search results respectively and they are displayed according to specific keywords advertisers can define individually.

Keyword related advertising is the main advantage as Search Advertising is able to reach a relevant target group in a very simple and precise way.

These keywords can be complemented with a range of options like location-based factors, website type, audience type or re-marketing based on user behavior.

The biggest trump card of Search Advertising, however, is its role in the general user behavior:

Search engines, be they stand-alone for general search or within shops, are a very common access to any kind of web activity. Therefore they have to be seen as the Internet’s entry door. It is not for nothing that search engines are usually the most visited website in a country.

These circumstances lead to the fact that Search Advertising is very suitable for conversion oriented approaches, which is also reflected in the pricing, which is often based on a certain action.

The common pricing model in Search Advertising is cost per click (CPC). Advertisers only pay if an ad was successful. CPCs usually depend on the demand for certain keywords.

**Market size**

The global Search Advertising market volume was about US$90.7 billion in 2016 and has a share of 46% of the Digital Advertising market. With this share, Search Advertising was the by far biggest market in Digital Advertising.

With a cumulated amount of US$76.6 billion, the US, China and Europe covered 84% of the global Search Advertising market.

The US has had a pioneering role in this market; hosting Google as the most relevant player worldwide.

Accordingly, it was by far the leading market in Search Advertising and generated revenue of about US$33 billion in 2016. That was a 41% share of the total US Digital Advertising market.

With about US$20 billion in 2016, the market in Europe was the smallest of all regions. The gap between Europe and the US in particular was not as big as in other segments of Digital Advertising, although the European Market just accounts for 60% of the US.


This high relevance mainly came from the high proportion of Search Advertising within e-commerce platforms, also known as e-commerce advertising which we are considering as Search Advertising.

The outstanding role of mobile in China in general becomes very clear in the segment of Search advertising.

Mobile revenue shares in the US and Europe were with 37% and 23% significantly smaller than China. The corresponding share in China was 56%.
SEARCH ADVERTISING WITHIN E-COMMERCE DRIVES THE CHINESE MARKET

Future developments

Search Advertising will keep its high share within the Digital Advertising Market, although it will lose some percentage points through 2021.

We expect that Search Advertising is growing with an average annual growth rate of 9.4% to 2021 to reach a total market size of US$142.5 billion.

With average annual growth rate of 18% to 2021, China is the fastest growing market compared. This development is mainly driven by significant growth of the average mobile revenue per internet user and a general shift towards mobile internet usage.

Accordingly, the desktop Search Advertising revenue is declining rapidly while the mobile revenue share has the highest growth rate with 30% CAGR 1 to 2021.

The US market will lose its leading role with a total of US$42.4 billion and a mobile share of 48%. As the desktop revenue is stagnating, an increasing average mobile revenue per internet user is the stimulating factor also in the US. Overall, the US Search Advertising market is growing with 5.1% CAGR to 2021.

Europe has the smallest growth with a CAGR of 4.7% to 2021. Again, we can observe that mobile does not have the same impact on the market as in the other markets compared.

Nevertheless, mobile revenue is growing with a CAGR of 9.1% to 2021, while desktop Search Advertising in Europe revenue is growing moderately with an average growth rate of 3.2% per year. The expected market size in Europe is USD$24.6 billion in 2021.

Regarding the diversity of the competitor landscape, we do not expect any opening of the market, but more the contrary. A further consolidation in regions which do not have just one dominating player yet is most likely.

Assumptions and sensitivity

We see Search Advertising as a very promising way to advertise, because advertisers are able to reach target groups while they are gathering information, not only incidentally.

Therefore, Search Advertising is able to reach potential customers in high-involvement buying decisions, which causes higher average revenues per user.

Although Search Advertising is not as technology driven as compared to other segments in Digital Advertising, we are expecting a constant development of the search technologies, especially in the area of targeting and individualized ads with another positive effect on the revenue per user.

We do not believe that mobile has an above average impact on the market development such as in Banner or Video Advertising.

Nevertheless the market is following a general development of an increasing usage of mobile internet, which necessarily causes higher mobile revenues.

The developments of Chinese and the European market are both in need of explanation.

The key assumption for the extraordinary growth in China is the outstanding role of Search Advertising within the context of e-commerce platforms.

Paid search results within online shops also have to be considered as Search Advertising. The general development of e-commerce in China is a key driver for the Search Advertising revenue.

The development in Europe is similar to the US, even so we have to take into account that the small mobile share in some European countries and a more reluctant attitude may slow down the growth of mobile revenue.

1: CAGR: Compound Annual Growth Rate/ average growth rate per year.
SEARCH ADVERTISING IN MAJOR REGIONS

Market KPI comparison by region

Revenue forecast
in million US$ by region

United States

China
- Revenue forecast: +18.0% p.a.
  - Desktop: 2016: 24,039, 2021: 54,991

Europe
- Revenue forecast: +4.7% p.a.
  - Desktop: 2016: 19,606, 2021: 24,613
  - Mobile: 2016: 15,105, 2021: 6,965

Revenue per Internet user
in US$ by region

United States
- 2016: 45.9, 2021: 76.5

China
- 2016: 12.7, 2021: 4.8

Europe
- 2016: 9.5, 2021: 13.7

Source: Digital Market Outlook 2016
# SEARCH ADVERTISING IN MAJOR REGIONS

## Market KPI comparison by region

### Revenue

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</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>mUS$</td>
<td>32,983</td>
<td>36,099</td>
<td>38,448</td>
<td>40,146</td>
<td>41,356</td>
<td>42,391</td>
<td>+5.1%</td>
<td>24,039</td>
<td>30,543</td>
<td>37,076</td>
<td>43,119</td>
<td>49,373</td>
<td>54,991</td>
<td>+18.0%</td>
<td>19,606</td>
<td>20,684</td>
<td>21,754</td>
<td>22,800</td>
<td>23,775</td>
<td>24,613</td>
<td>+4.7%</td>
</tr>
<tr>
<td>Mobile</td>
<td>mUS$</td>
<td>12,146</td>
<td>14,869</td>
<td>16,981</td>
<td>18,537</td>
<td>19,663</td>
<td>20,484</td>
<td>+11.0%</td>
<td>13,406</td>
<td>20,469</td>
<td>28,929</td>
<td>36,087</td>
<td>43,378</td>
<td>49,799</td>
<td>+30.0%</td>
<td>4,501</td>
<td>5,060</td>
<td>5,595</td>
<td>6,080</td>
<td>6,531</td>
<td>6,965</td>
<td>+9.1%</td>
</tr>
<tr>
<td>Desktop</td>
<td>mUS$</td>
<td>20,837</td>
<td>21,230</td>
<td>21,467</td>
<td>21,609</td>
<td>21,693</td>
<td>21,907</td>
<td>+1.0%</td>
<td>10,633</td>
<td>10,074</td>
<td>8,147</td>
<td>7,032</td>
<td>5,995</td>
<td>5,192</td>
<td>-13.0%</td>
<td>15,105</td>
<td>15,624</td>
<td>16,159</td>
<td>16,720</td>
<td>17,243</td>
<td>17,648</td>
<td>+3.2%</td>
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### Internet users

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<td>517</td>
<td>521</td>
<td>523</td>
<td>+1.2%</td>
</tr>
</tbody>
</table>

1: CAGR: Compound Annual Growth Rate/ average growth rate per year.

Source: Digital Market Outlook 2016
# KEY ASSUMPTIONS BY REGION

## Market sizing subjects for Search Advertising forecast

### United States
- Pioneer market; hosting Google as the most relevant player worldwide
- Accordingly biggest market with US$33 billion in 2016
- Mobile share of the total revenue was 36.7%
- Average revenue per user approx. four times higher than in China
- Still growing with a CAGR\(^1\) of 5.1% although it is a pioneering market
- Corresponding to our key assumption, that the mobile ARPU\(^2\) is developing significantly, we expect a mobile CAGR of 11%
- Desktop revenue is stagnating

### China
- One of few countries where Google is not relevant
- Nevertheless second biggest of the three markets with US$24 billion in 2016
- Highest mobile share of the total revenue with 55.8%
- Highest average growth rate of 18% p.a. due to significant ARPU growth
- According to China’s mobile first status, desktop revenue is declining rapidly and mobile revenue has the highest growth rate (30% CAGR)

### Europe
- Smallest of the three regions with US$19.6 billion in 2016
- Conservative approach: Desktop is strong, mobile share of the total revenue was only 23%
- Search Advertising was with 47% the biggest segment in the Digital advertising market
- Smallest growth with a CAGR of 4.7%
- Mobile revenue is growing relatively slow with a CAGR of 9.1%
- Desktop revenue is growing very moderately with an average growth rate of 3.2% p.a.

### Trend signals
- Although the market is consolidated and more or less limited to one key player, we are expecting a constant development of the search technologies
- Targeting und individualized ads with a positive effect on the revenue per user
- High relevance of so-called e-commerce advertising, which means paid-for-search listings within single e-commerce platforms
- We define these as Search Advertising and see them as one of the main reasons for the importance of Search Advertising in China

1: CAGR: Compound Annual Growth Rate/average growth rate per year
2: ARPU: Average revenue per user
Source: Digital Market Outlook 2016
Company profile

Overview

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad revenue growth</td>
<td>13% YoY (2015)</td>
</tr>
<tr>
<td>Full-time employees</td>
<td>61,814 (2015)</td>
</tr>
<tr>
<td>Searches per day</td>
<td>approx. 3.5 bn (2015)</td>
</tr>
<tr>
<td>Market capitalization</td>
<td>456 bn (Alphabet Inc. Aug 2016)</td>
</tr>
<tr>
<td>founded</td>
<td>1998</td>
</tr>
</tbody>
</table>

Background

Google Inc. is a multinational technology company specializing in Internet-related services and products and the leading search engine based in Mountain View, California, United States. Google operates the search engine of the same name.
Most of its profits are derived from Google AdWords. Adwords is an online advertising service that places advertising near or above the list of search results.

Google reorganized itself under the holding Alphabet Inc. with Google as the leading subsidiary in August 2015.

Google will continue to be the umbrella company for Alphabet’s Internet interests.

Analyst opinion

Google AdWords is the dominating product in the field of Search Advertising.
But besides the Search Engine along with Google AdWords, Google offers many other Internet related services such as Google Maps, cloud storage, cloud based office suites, e-mailing, calendars etc. All these products gather user data and insights, but most of them are not monetized yet.

A successful integration of AdWords or other advertising approaches into these Google products could have a significant impact on Google’s advertising revenue and on the whole Digital Advertising market accordingly.
The chart above shows the market dominance of Google in the US, 85% of the US internet users searched the internet with Google in July 2016. Microsoft's bing and Yahoo! Search play just a minor role. Other search engines are negligible.

We can observe a different search engine landscape in China, which is slightly wider than in the US and Europe. Most used search engine is Baidu with 81%, while Google has a share of only 2.4%. Baidu's revenue with advertising in 2015 was about US$ 10 billion.

The dominating position of Google is even stronger in Europe than in the US. Although we observe the same players as in the US, regional relevant search engines like Yandex in Russia or Seznam in the Czech Republic have to be considered on a more precise level.

Source: Statcounter
DIGITAL ADVERTISING: CLASSIFIEDS
Overview

Subject

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Essentials

Classifieds are small ads grouped under a specific heading
Market size was US$16.5 billion in 2016

Biggest market is Europe with US$6.1 billion in 2016
China has the highest average growth rate of 22.0%

Finn plays a nearly monopolistic role in the Norwegian market

› Customer benefit, Market size, Future developments
› Market KPI comparison by region in charts and tables
› Key Takeaways
› Driving Forces and future outlook

Definitions, About, Imprint ................................................ 62
CLASSIFIEDS MARKET

Market Focus: Classifieds
**Customer benefit**

Classifieds are **small ads grouped under a specific heading** (classification) such as automobiles or real estate.

Online classifieds usually appear in specific portals, which can be differentiated in **horizontals and verticals**.

While horizontal business models have a generalist approach and cover most topics, vertical pure player only have specific classifieds like employment listings, real estate listings or automotive listings.

We can observe that many markets are **dominated either by one generalist service** (e.g. FINN.no in Norway) or by **vertical specialist platforms** (e.g. mobile or stepstone in Germany).

Also, some kinds of product listings on e-commerce platforms are kind of classifieds. These play an extraordinary role in the Chinese market.

Besides relatively low prices, classifieds have the advantage to reach very **specific target groups** **without excessive scattering losses** which we can observe in the field of Banner Advertising for instance.

In contrast to other Digital Advertising formats, Classifieds have a **pull characteristic**. The audience is usually looking for the product the classified is advertising.

The common pricing model is a **one-time fee per listing**. The fee has to be paid by the advertiser, regardless of the outcome of the ad, depending on factors such as the ad's position, size or display duration.

We consider B2B or B2C, but **no C2C classifieds**. Revenue from flea market or second-hand trade platforms and apps like Shpock or letgo, for instance, are not considered within this report.

**Market size**

The **global Online Classifieds market size** was **US$16.5 billion in 2016** and had a share of 8.3% of the Digital Advertising market.

With this share Online Classifieds was the smallest market in Digital Advertising.

The **United States**, **Europe** and **China** covered 80.0% of the global Online Classifieds market with an accumulated revenue of **US$13.7 billion**.

**Europe** was the biggest market with a revenue of **US$6.1 billion in 2016**. With this market volume it was nearly twice the size of the **US** market with a market size of **US$3.3 billion** or the **Chinese** market with **US$3.7 billion**.

In contrast to many other digital markets, the **US** market was surprisingly the **smallest one**, despite the pioneering role in digital markets the **US** usually has.

Classifieds had a share of 4.1% of the total market in the **US**.

A closer look at the **US** market leads to the conclusion that this pioneering role might be the reason for the **low share of Online Classifieds**.

**Innovative advertising formats** like Social Media Advertising were dominating the market with a share of 18.5% and replacing the somehow old-fashioned classifieds format.

**In Europe**, however, the share of Online Classifieds was 14.5%, while Social Media Advertising accounts for 11.8%.

In some **European** countries with nearly monopolistic and horizontally aligned players **Online Classifieds play the most important role** in the market.

In Norway, for instance, Online Classifieds was the largest segment with a **share of 31.5%**.
FAST AND STRONG GROWTH IN CHINA – MOBILE ONLY USE CASES ARE RARE

Future developments

The global Online Classifieds market is growing with an average annual growth rate of 9.2% to 2021 to reach a total market size of US$25.6 billion.

We expect a moderate growth in the US and in Europe. While Online Classifieds in the US are growing with an annual growth rate of 6.6% to 2021, the European market is growing with a CAGR of 3.4% in the same timeframe.

Nevertheless, the slightly higher growth in the US does not lead to more importance of Online Classifieds in the total Digital Advertising market.

The share decreases strongly and Classifieds only account for 3.9% of the US Digital Advertising market in 2021 compared to 8.5% in 2016.

Despite the relatively small growth rate in Europe the status of Online Classifieds stays high, particularly compared to the share in US market described above.

They will account for 12.0% of the European market in 2021.

The relevance gets clear, when we compare the share on the global market in 2021, which is 7.7%.

The Chinese market, however, is growing rapidly with an annual growth rate of 22.2% to 2021.

Reasons for this outstanding fast growth can be found in a generally fast growing Digital Advertising Market in China (17.6% CAGR 2016 to 2021) and a high relevance of paid product listing within the e-Commerce platforms. Thus, the growing e-Commerce market in China, with a CAGR of 17.5% to 2021 reaching a total market volume of US$756 billion is driving the Classifieds market.

The mobile share is growing fast over all regions with average annual growth rates between 26.2% and 29.0% to 2021.

Nevertheless, the size of mobile revenue stays small, due to its very small basis in 2016.

Assumptions and sensitivity

Differences regarding formats, pricing models, reach and audiences between Online Classifieds and other Digital Advertising formats make it hard to compare these markets without any further explanation.

Prices are often relatively low and not tangible with the typical pricing models like cost-per-click (CPC) or cost-per-mille (CPM).

The typical pricing for Online Classifieds is a specific one-time fee independent from the outcome.

Therefore, we have low average revenue per Internet user, especially compared to success-based advertising models like Search Advertising.

Furthermore, the general shift towards mobile advertising, which can be seen in all other segments of Digital Advertising, does not affect Online Classifieds in the same way.

Upcoming C2C flea market apps indicate initial approaches of mobile only Online Classifieds.

C2C classifieds revenue, however, is not in scope and mobile only use cases for professional advertisers are rare and usually limited to highlighting existing classifieds in mobile apps.

It is difficult to differ between product listings with the characteristic of classifieds and product listings within the search of e-Commerce platforms.

Non success-based product listings can be considered as classifieds. These product listings can be found much more often in China.

This, along with the development of the e-Commerce market in China is the basis for our very high growth assumptions.

1: CAGR: Compound Annual Growth Rate/ average growth rate per year.
ONLINE CLASSIFIEDS IN MAJOR REGIONS

Market KPI comparison by region

Revenue forecast
in million US$ by region

United States
- Desktop: +6.6% p.a.
  - 2016: 3,307
  - 2021: 4,556
- Mobile: 2016: 3,024, 2021: 3,633

China
- +22.0% p.a.
  - 2016: 3,733
  - 2021: 10,071

Europe
- +3.4% p.a.
  - 2016: 5,998
  - 2021: 6,787

Revenue per Internet user
in US$ by region

United States
- 2016: 1.1
- 2021: 3.2

China
- 2016: 0.5
- 2021: 1.5

Europe
- 2016: 0.3
- 2021: 0.9

Source: Digital Market Outlook 2016
## Classifieds in major regions

### Market KPI comparison by region

#### Revenue

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>mUS$</td>
<td>3,307</td>
<td>3,577</td>
<td>3,863</td>
<td>4,117</td>
<td>4,332</td>
<td>4,556</td>
<td>+6.6%</td>
<td>3,733</td>
<td>4,856</td>
<td>5,977</td>
<td>7,394</td>
<td>8,738</td>
<td>10,071</td>
<td>+22.0%</td>
<td>6,134</td>
<td>6,353</td>
<td>6,573</td>
<td>6,793</td>
<td>7,016</td>
<td>7,240</td>
<td>+3.4%</td>
</tr>
<tr>
<td>Desktop</td>
<td>mUS$</td>
<td>3,024</td>
<td>3,159</td>
<td>3,308</td>
<td>3,440</td>
<td>3,555</td>
<td>3,633</td>
<td>+3.7%</td>
<td>3,294</td>
<td>4,175</td>
<td>5,056</td>
<td>6,240</td>
<td>7,367</td>
<td>8,506</td>
<td>+20.9%</td>
<td>5,998</td>
<td>6,187</td>
<td>6,361</td>
<td>6,518</td>
<td>6,660</td>
<td>6,787</td>
<td>+2.5%</td>
</tr>
<tr>
<td>Mobile</td>
<td>mUS$</td>
<td>282</td>
<td>419</td>
<td>555</td>
<td>677</td>
<td>777</td>
<td>922</td>
<td>+26.7%</td>
<td>438</td>
<td>681</td>
<td>921</td>
<td>1,153</td>
<td>1,371</td>
<td>1,566</td>
<td>+29.0%</td>
<td>136</td>
<td>166</td>
<td>212</td>
<td>275</td>
<td>356</td>
<td>453</td>
<td>+27.2%</td>
</tr>
</tbody>
</table>

#### Internet users

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>m</td>
<td>265</td>
<td>270</td>
<td>275</td>
<td>280</td>
<td>284</td>
<td>288</td>
<td>+1.7%</td>
<td>854</td>
<td>890</td>
<td>924</td>
<td>958</td>
<td>989</td>
<td>1016</td>
<td>+3.5%</td>
<td>493</td>
<td>503</td>
<td>510</td>
<td>517</td>
<td>521</td>
<td>523</td>
<td>+1.2%</td>
</tr>
</tbody>
</table>

1: CAGR: Compound Annual Growth Rate/ average growth rate per year.

Source: Digital Market Outlook 2016
KEY TAKEAWAYS BY REGION

Market sizing subjects for Classifieds forecast

**United States**
- With a market size of US$3.3 on a similar level as China
- Mobile is nearly irrelevant with a share of 8.5% of the total market

**China**
- Market size of US$3.7 billion
- Despite China’s mobile first status, the mobile share of total revenue was only 12%

**Europe**
- Nordic and East European countries are very strong in Classifieds
- Therefore Europe was the biggest market in comparison to the US and China with US$6.1 billion in 2016
- Mobile share of total revenue with 2.2%

### Market size
- **United States**: US$3.3 billion
- **China**: US$3.7 billion
- **Europe**: US$6.1 billion

### Growth rate
- **United States**: Average growth rate of 6.6% to 2021
- **China**: Highest average growth rate of 22.0%
- **Europe**: Smallest growth with a CAGR of 3.4%

### Trend signals
- Relevant mobile only use cases, which we do not see yet, would have a disruptive effect on the mobile development
- High growth rates of the e-Commerce market are driving the Classifieds market
- Market is already saturated to the greatest possible extend
- New B2C business models with a mobile focus could be a leverage point, although these are not in the looming yet

---

1: CAGR: Compound Annual Growth Rate/ average growth rate per year 
Source: Digital Market Outlook 2016
Schibsted is an Norwegian media group operating in fields related to newspapers, publishing, multimedia and other media products.

Furthermore, Schibsted has market leading positions in the online classifieds markets in Norway, Sweden, France, Spain, Italy, Ireland, Austria, Malaysia and Hungary.

This business area also includes online classifieds sites in several early stage markets.

The company is operating the leading classifieds platforms in several European markets like FINN in Norway and Leboncoin in France.

Finn plays a nearly monopolistic role in the Norwegian market.

Preferred classifieds websites in Norway

<table>
<thead>
<tr>
<th>Website</th>
<th>First choice</th>
<th>Second choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINN</td>
<td>87%</td>
<td>10%</td>
</tr>
<tr>
<td>ebay</td>
<td>43%</td>
<td>7%</td>
</tr>
<tr>
<td>Rubrikk.no</td>
<td>30%</td>
<td>1%</td>
</tr>
<tr>
<td>other</td>
<td>17%</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Segment</th>
<th>Definition</th>
<th>Out of segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner</td>
<td>Banner advertising is one of the most common forms of digital advertising. Banners come in various shapes, sizes and formats and are displayed on a website accessed via desktop PCs or on a mobile-enabled website or in an app. Videos which are displayed instead of a static banner outside of a certain video player are considered Rich Media.</td>
<td>Audio advertising</td>
</tr>
<tr>
<td>Video</td>
<td>Video advertising considers all ad formats within web- or app-based video players. These formats are typically video ads that appear before, during or after the streamed video (pre-roll, mid-roll, post-roll video ads). In addition to these video ads, text- or image-based overlays that appear while watching a video are also categorized as video advertising.</td>
<td>E-mail marketing</td>
</tr>
<tr>
<td>Search</td>
<td>Search engine advertising describes advertisements that are displayed within search result pages. These advertisements are usually text-based, but can be displayed as images where applicable. Sponsored links and keyword advertising are part of search engine advertising which can be targeted on local or keyword-related factors.</td>
<td>Search engine optimization</td>
</tr>
<tr>
<td>Social Media</td>
<td>Social media advertising includes all ad spending generated by social networks or business networks. Ads in social networks can appear as sponsored posts within organic content or besides the newsfeed.</td>
<td>Influencer marketing</td>
</tr>
<tr>
<td>Online Classifieds</td>
<td>Revenues from classified ads are the fees paid by advertisers in order to display an ad or listing around a specific vertical such as automotive, recruiting or real estate. The fee has to be paid by the advertiser, regardless of the outcome of the ad.</td>
<td>C2C Classifieds</td>
</tr>
</tbody>
</table>
9 Markets, 34 segments & 85 sub-segments

- **Digital Media**
  Video-on-Demand, Digital Music, Video Games, ePublishing

- **FinTech**
  Digital Payments, Business Finance, Personal Finance

- **eTravel**
  Online Travel Booking, Mobility Services

- **eServices**
  Event Tickets, Fitness, Dating Services, Food Delivery

- **eHealth**
  Diabetes, Hypertension, Heart Failure

- **Connected Car**
  Connected Hardware, Vehicle Services, Infotainment Services

- **Smart Home**
  Home Automation, Security, Home Entertainment, Ambient Assisted Living, Energy Management

- **e-Commerce**
  Fashion, Electronics & Media, Food & Personal Care, Furniture & Appliances, Toys, Hobby & DIY

- **Digital Advertising**
  Banner Ads, Video Ads, Search Ads, Social Media Ads, Classifieds

Details

- 50 countries
- Direct access & downloads
- 7-Year coverage: 2015 – 2021
- Revenue forecasts

User count & penetration

Comparable data

**Exclusive** part of the **Statista Corporate Account**

*Access to more than 1,000,000 statistics and all digital markets*

[more information]
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