

# ***PwC Entertainment & Media Outlook 2017-2021***





**Consumer/end-user &  
advertising spending**



**5 Year historical &  
5 Year forecast data**



**54** countries



**17** segments



Data  
consumption



Video games



Internet  
access



TV advertising



Cinema



Music



Radio



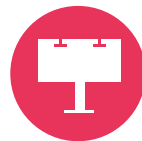
Magazine  
publishing



Newspaper  
publishing



Book publishing



Out-of-home  
advertising



Business-to-business



E-sports



Internet  
advertising



Internet  
video



Traditional TV  
and home video



Virtual reality

A person's silhouette is shown holding a smartphone up to capture a photo of a vibrant night scene. The background is filled with numerous bright, out-of-focus yellow and white lights, creating a bokeh effect. The person's hands and the phone are in the foreground, with the phone's screen showing a small, clear image of the lights. The overall atmosphere is one of a lively event or festival at night.

***Emerging technologies are enabling companies to differentiate by creating innovative user experiences***

# *The accelerating speed of technological change is opening up large opportunities for innovation in product offerings that revolve around user experience*

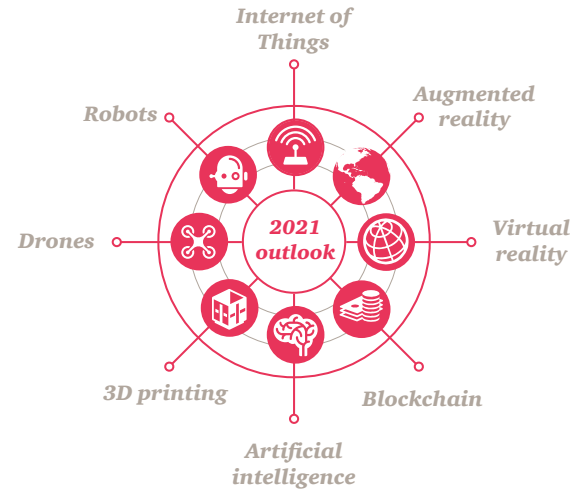


*Emerging technologies are changing the E&M industry*

**1** Technology is the driving force behind new and rapidly growing segments



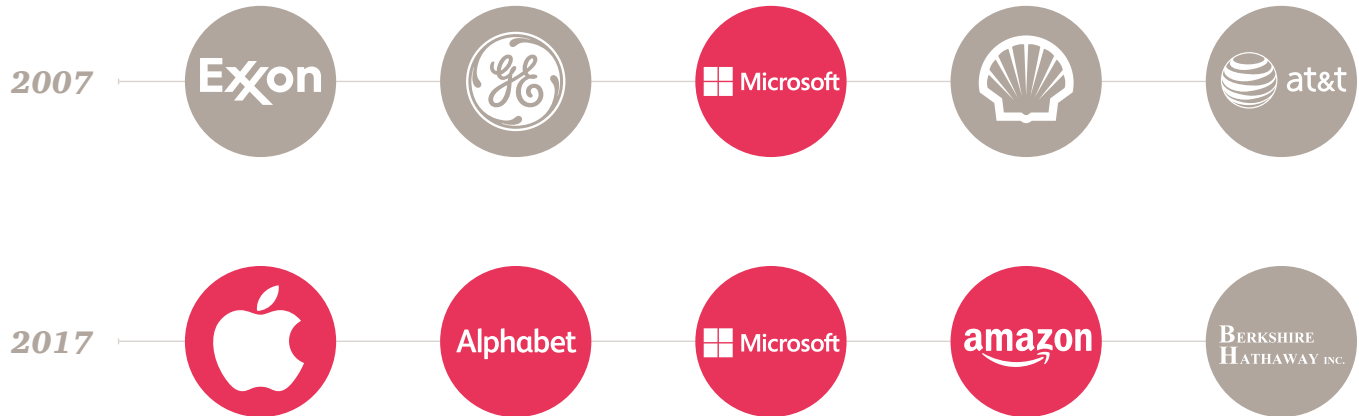
**2** Exploitation of data and new technology is enabling innovative user experiences.



# *Technology companies now dominate the world's largest companies measured by market capitalization*

Top 5 public traded companies by market cap (June 30)

● Tech  
● Other



Source: FT Global 500 & Ycharts.com

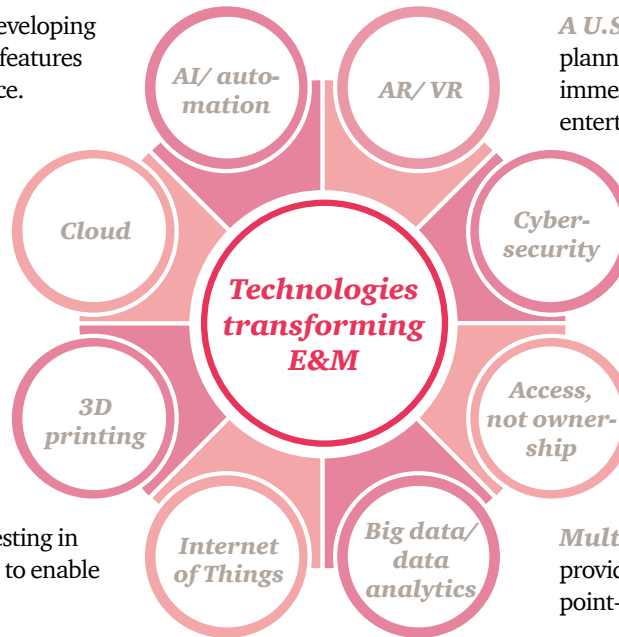
# Companies are already leveraging emerging technologies to enhance user experience

**Worldwide tech company** developing next mobile OS with AI-powered features to streamline consumer experience.

**Global telecom company** invests in entertainment operating system to deliver a personalized entertainment experience across all devices.

**Multinational E&M conglomerate** has created a patent-pending 3D printer.

**E-commerce company** is investing in an IoT voice-led operating system to enable smart devices.



**A U.S.-based VR startup** is planning to open a VR multiplex immersing consumers in a personalized entertainment experience.

**Social networking company** releases anti-harassment capabilities to enhance user safety.

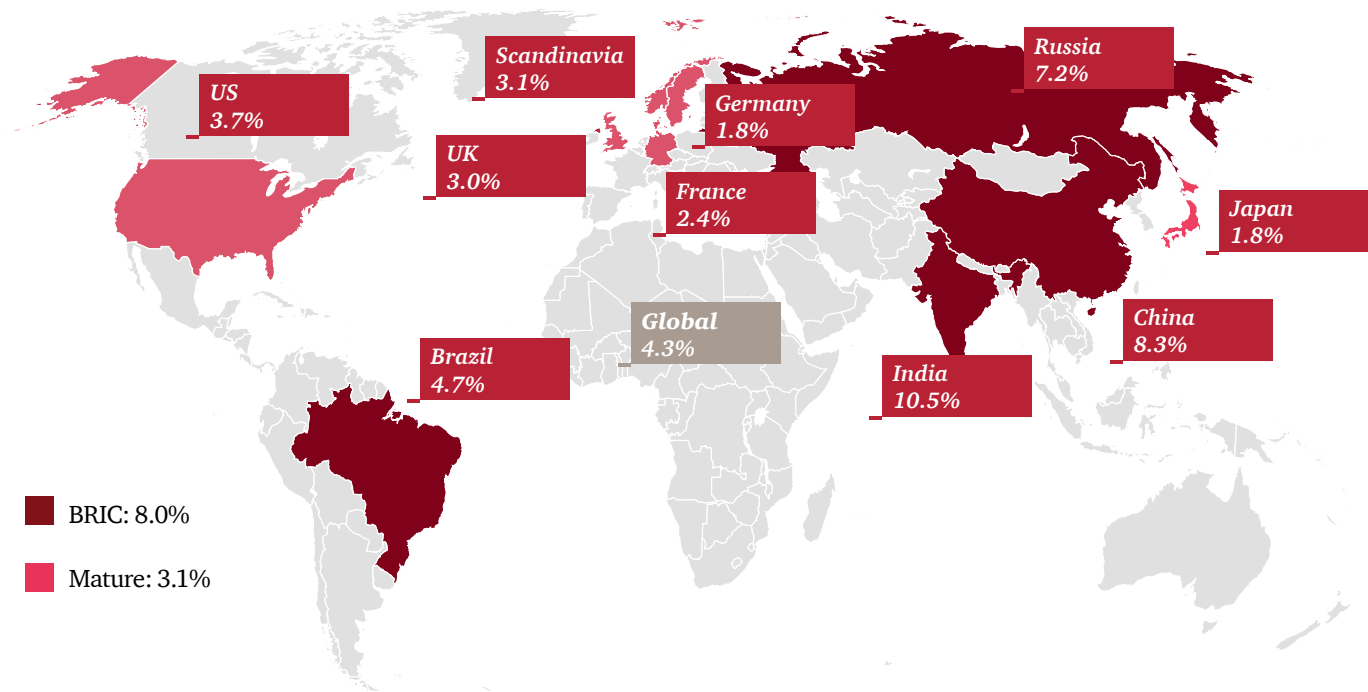
**The sharing economy** shifts consumer behaviour from owning assets.

**Multinational tech company** providing real-time sports statistics and point-by-point analysis.



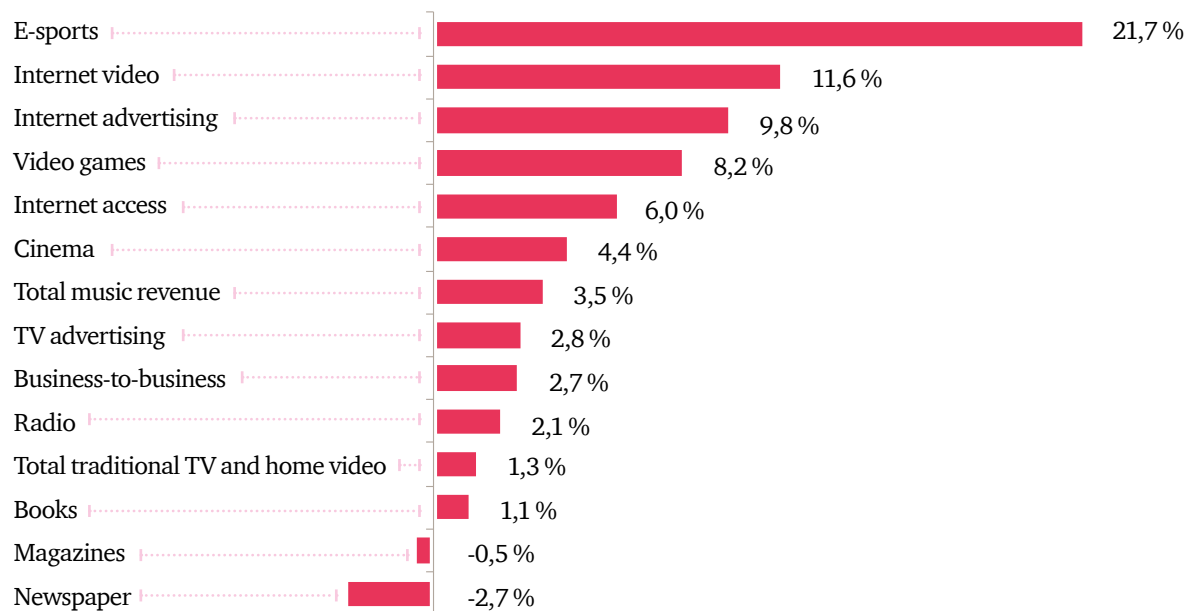
***What Are the Global Trends?***

## *Expected global growth in E&M expenditures of 4.3%*



## ***E-sports and internet video are expected to outperform the other segments in the global E&M market in terms of percentage growth***

Global growth by segment 2016-2021F

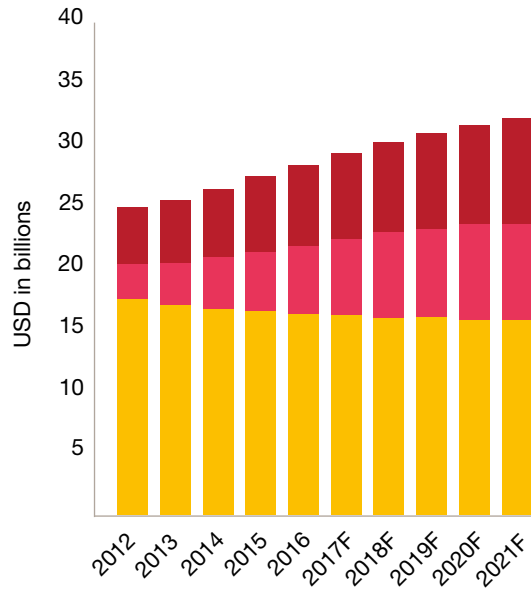


An aerial photograph of the Oslo Opera House, showing its iconic white, sloped roof that functions as a public plaza. The building's glass facade reflects the sky. Several people are visible walking on the roof plaza. A red rectangular box is superimposed on the lower right portion of the image, containing white text.

## *The Scandinavian E&M market*



## Spending on digital channels is expected to drive growth in the Scandinavian E&M market



2016-2021F CAGR

Internet Access

5.0%

Digital

8.1%

Non-Digital

-0.9%

Total  
Digital and  
Non-Digital

3.1%

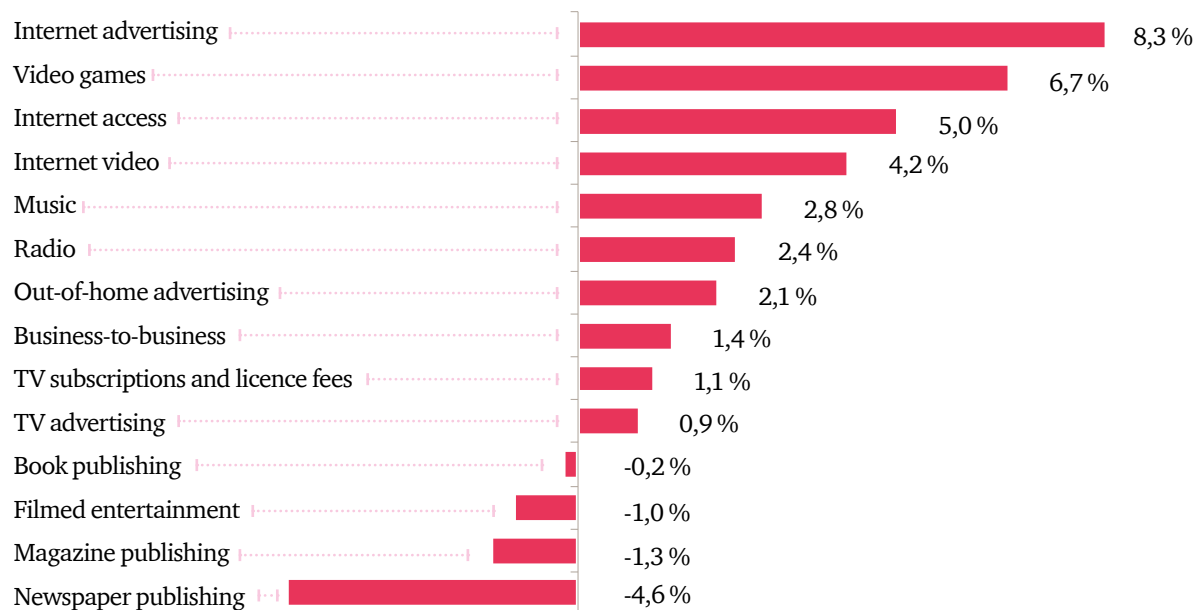
### Digital is defined as:

- Online and mobile internet advertising
- Mobile TV subscription
- Digital music
- Electronic home video
- Online and wireless video games
- Digital consumer magazines circulation spending
- Digital newspaper circulation spending
- Digital trade magazine circulation spending
- Electronic consumer, educational, and professional books
- Satellite radio subscriptions



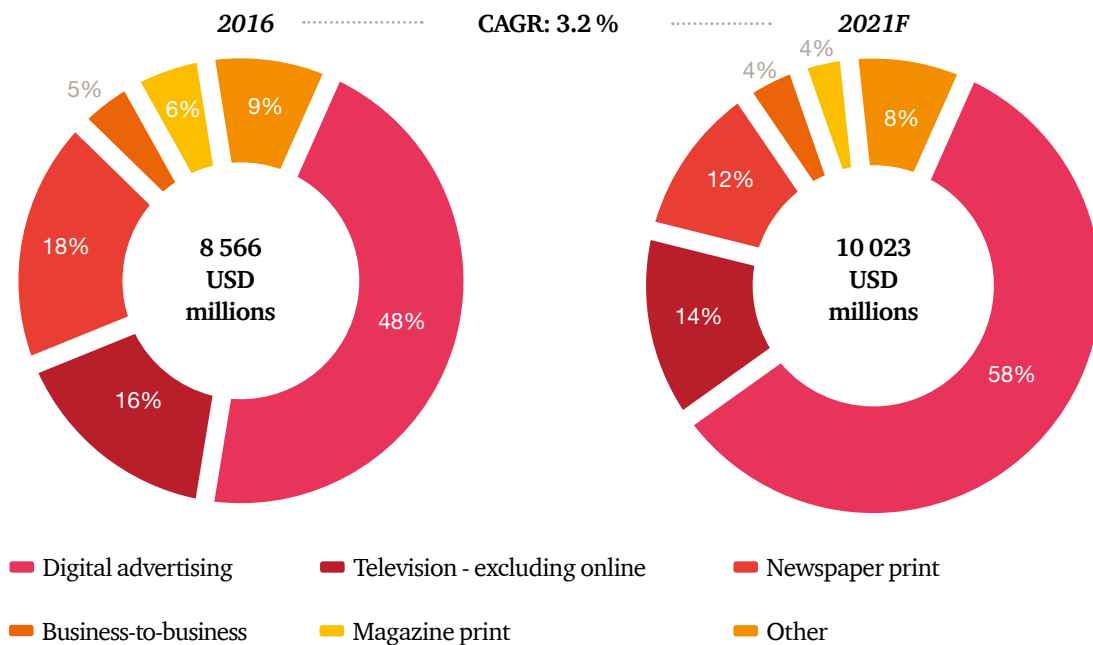
## ***Internet advertising is expected to lead growth across media segments in the Scandinavian E&M market towards 2021***

Scandinavian growth by segment 2016-2021F





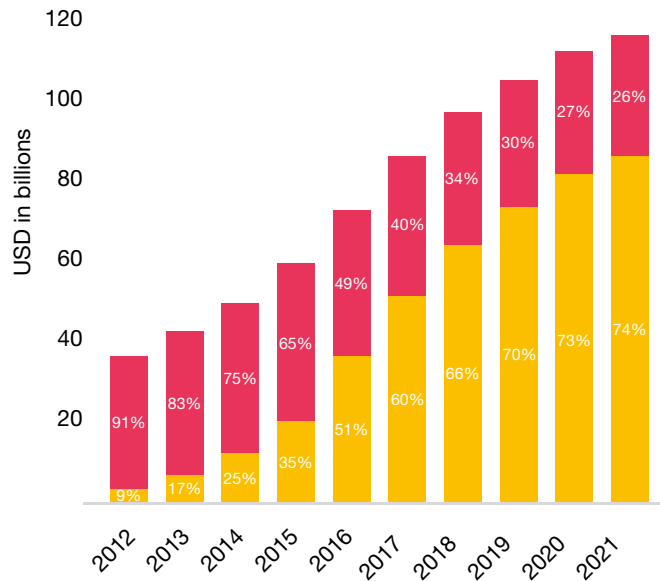
## *Digital advertising revenues are expected to represent 58% of total Scandinavian advertising revenues in 2021*





# *Mobile is expected to make up more than 70 % of internet advertising revenue in USA by 2021*

Internet advertising in US advertising revenue



## **2016 –2021F CAGR**

Mobile internet advertising in USA ..... **18.7%**

Non-Mobile internet advertising in USA ..... **-3.7%**

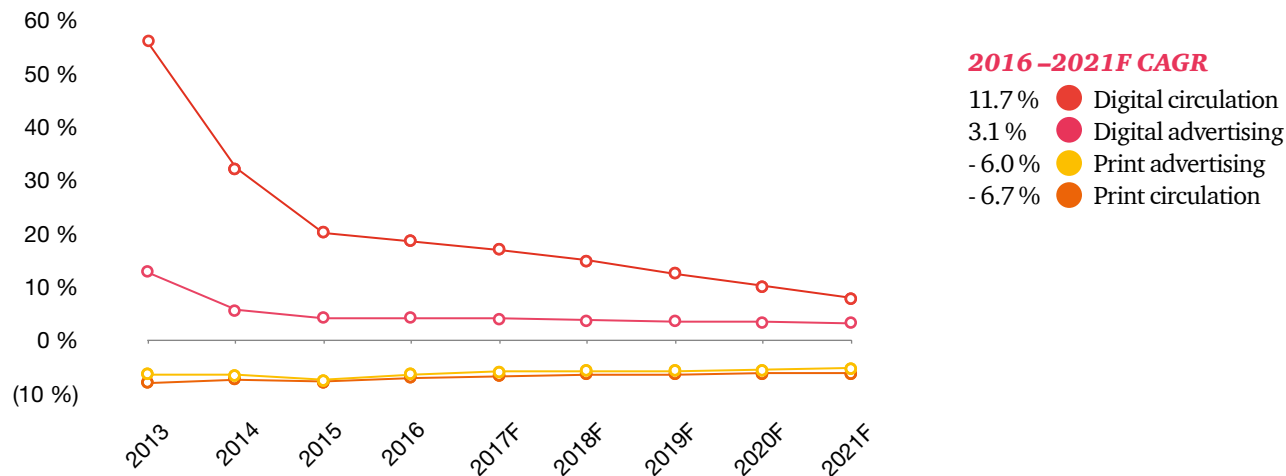


***User Experience Driving Growth***



## ***Print will continue to see a negative growth rate and digital will not compensate for this loss***

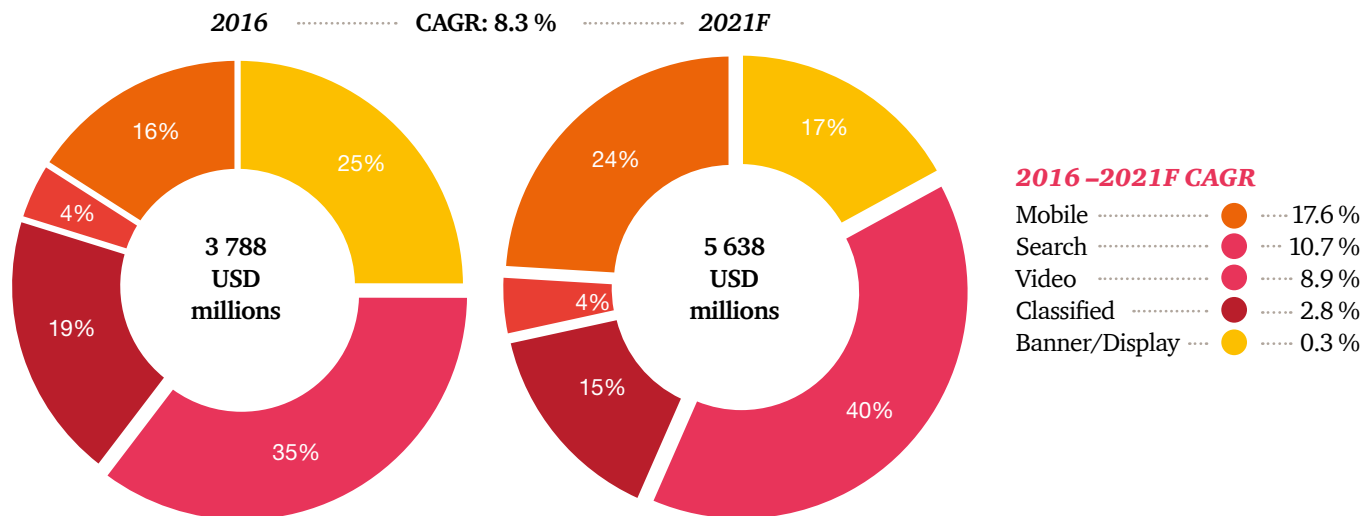
Year-over-year % growth rate in Scandinavia



# *Mobile will continue to be the biggest growth story towards 2021 in internet advertising*



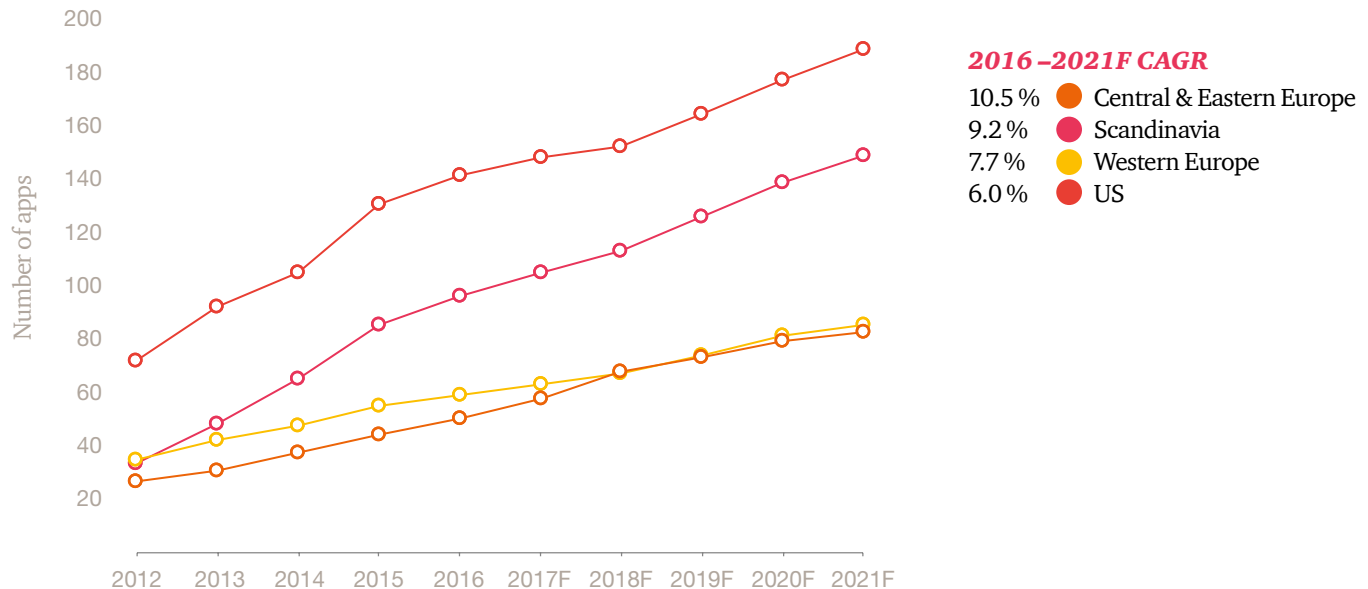
Internet advertising market by sub segment in Scandinavia





# Number of apps per smartphone & tablet is expected to continue to grow and drive growth in mobile internet advertising

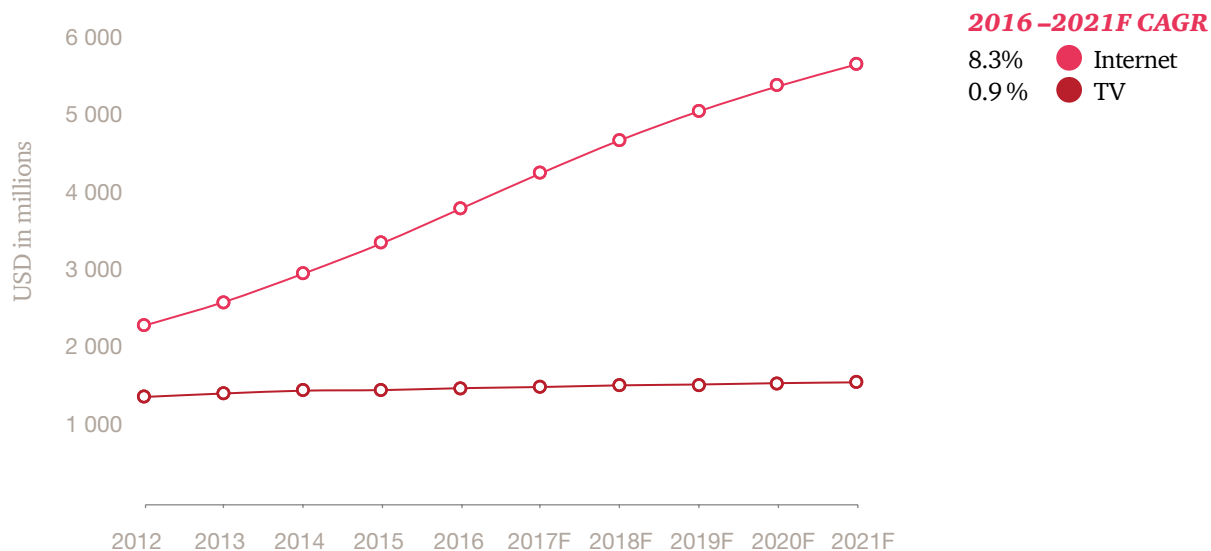
Apps per smartphone & tablet





## *The gap between TV advertising revenue and Internet revenue is increasing*

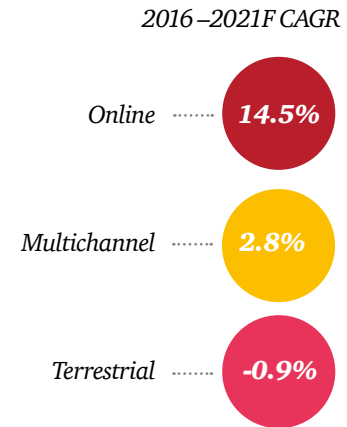
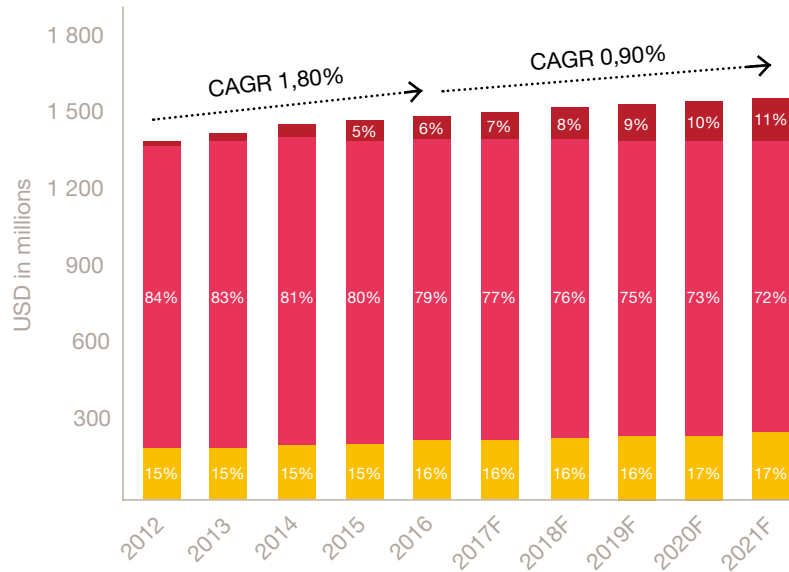
Internet and TV advertising revenues in Scandinavia





## Traditional losing ground to online streaming services focusing on user experience

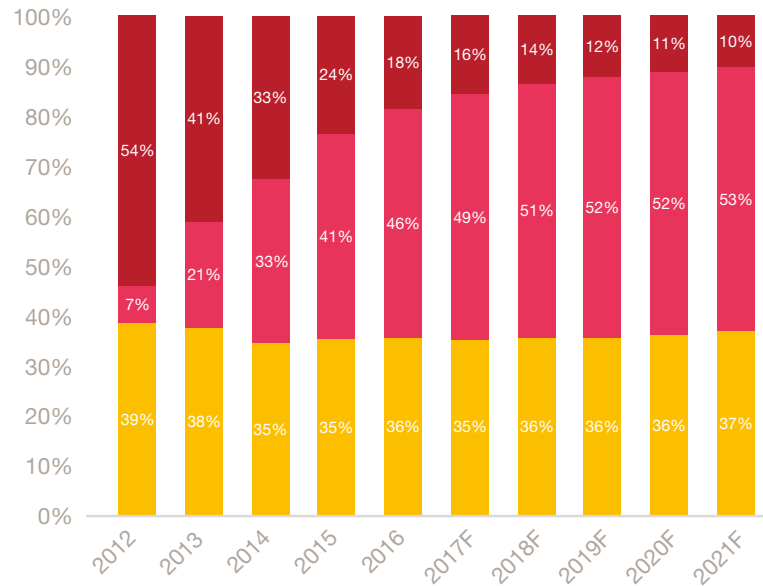
Traditional TV advertising is losing ground to online streaming services.





## *Electronic home video is expected to grow, but cinema is still keeping up*

Scandinavian filmed entertainment revenue



2016–2021F CAGR

*Electronic home video* .....

**4.2%**

*Cinema tickets* .....

**2.0%**

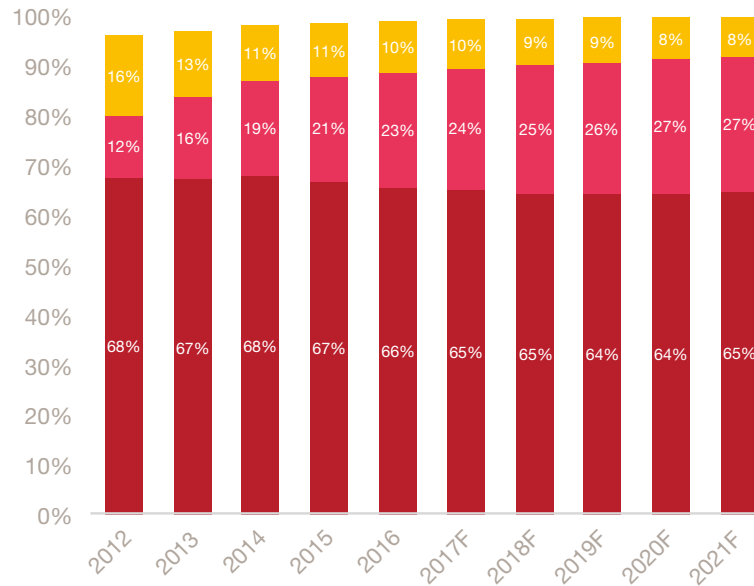
*Physical home video* .....

**-9.6%**



## *Despite growth in streaming, live music will continue to be the main revenue stream in the music industry*

Scandinavian music revenue



2016–2021F CAGR

Streaming ..... 6.7%

Live music ..... 2.5%

Physical music ..... -3.7%

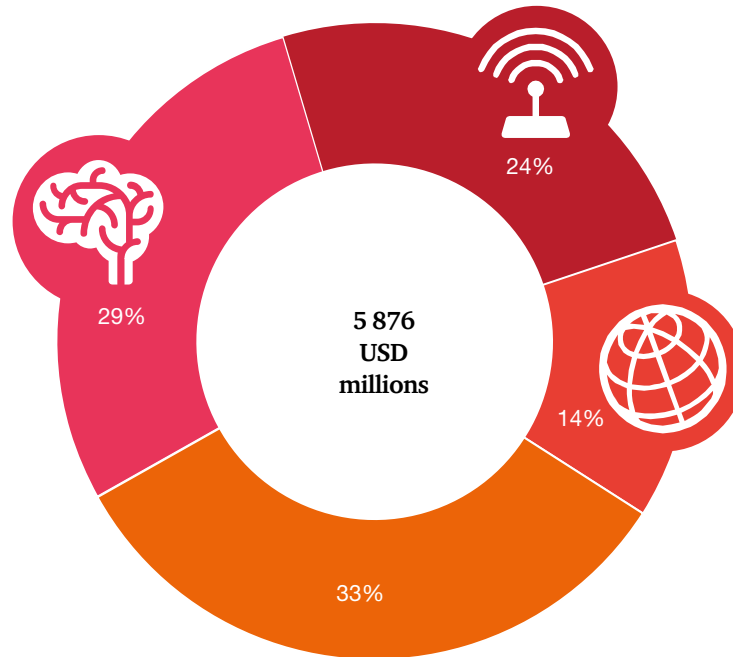


***Emerging technologies will change  
how companies generate, distribute  
and control content***

## Among emerging technologies, AI, IoT and VR received most funding in 2016

Global VC funding, Essential  
Eight technologies

AI  
IoT  
VR  
Other  
(Robots, AR,  
Drones, 3D  
Printing and  
Blockchain)



Source: CB Insights, PwC, VC Funding



# ***Benefits from AI include an improved ability to tap into consumer preferences and generate personalized content***

***AI can help companies innovate content creation and improve customer experience***

## **Simplifying content creation**

- AI-generated music
- AI generated video-ads

## **Improving the customer experience**

- AI-generated content curation (e.g. Spotify playlists)
- AI-generated product recommendations (film, TV, music)

## **Better, more creative decisions**

- Maximization of film and content licensing revenues
- AI-generated insight from video and social media

## **Freedom of repetitive tasks**

- Programmatic ad buying
- Newsletter curation, creation and distribution
- AI-generated sports summaries, film scoring and stock music

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***Artificial Intelligence (AI) could contribute up to \$15.7 trillion to the global economy by 2030 and the E&M industry can seize a significant share of this gain***

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PwC AI-report: Sizing the prize



# *Scandinavia is better positioned to create value from Internet Of Things compared to the rest of the world*

## *Key drivers for the Scandinavian IoT value creation potential*

- 1** Well developed fiber- and internet- infrastructure
- 2** 4G coverage is widely spread across Scandinavia. Sweden is leading in testing 5G coverage.
- 3** On average, each person in the Nordics has almost 3 devices connected to the internet in 2016. By 2021, this is expected to grow to 6 devices per capita, which represents four times as many devices as in the rest of the world.

Source: Connected Things: New digital ecosystems – unlocking the growth potential of IoT (2017) Arthur D. Little and Telia

*By expanding to new or even non-existing entertainment platforms, E&M companies can unlock the potential of IoT*

PwC AI-report: Sizing the prize



## 67M USD

IoT Scandinavian market size 2016



## 20 %

Nordic IoT CAGR 2016-2021 in the Nordics 2016 - 2021

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*We are at an amazing point in history for artists. A revolution is going to happen, and next year it's going to take over. It's the ability of artists to have the control and the say of what they do with their music at large. The answer to this is in the blockchain."*

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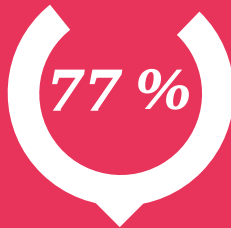
- Imogen Heap, British singer & songwriter



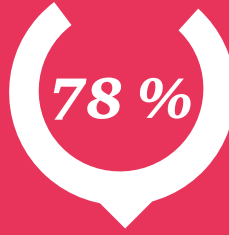
## ***CEO perspective: E&M CEOs are mostly concerned about changing consumer behaviour***



of E&M CEOs are concerned about changing consumer behaviour



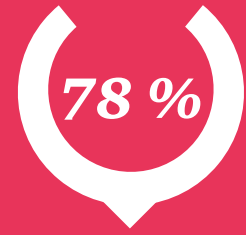
of E&M CEOs are concerned about uncertain economic growth



of E&M CEOs are concerned about availability of key skills



of E&M CEOs are concerned about the speed of technological change



of E&M CEOs are concerned about volatile energy costs

A pair of hands is holding a silver tablet against a white background. The tablet screen is white and displays red text. The text is centered and reads: "Find your own Outlook story online ..." followed by the URL "www.pwc.com/outlook" on the next line.

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Outlook story  
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