The following report is a deep dive into how Snapchatters are using AR in the Netherlands based on the Snap Consumer AR Global Report. For a more comprehensive market view, please read the Snap Consumer AR Global Report.
AR is a critical tool for brands to stand out and deliver customer value and confidence.

Introduction

AR is the next form of mobile engagement, elevating the consumer experience and setting new expectations for digital engagement.

AR’s Impact on Brands

AR is a critical tool for brands to stand out and deliver customer value and confidence.

AR is Evolving Fast

AR cannot be ignored as the new, rapidly-growing consumer experience that will soon be everywhere, all the time.

AR is Here Today and Here to Stay

AR is already here, widely recognized as both fun and useful and driving fast adoption and growth.

Conclusion

There is an imperative to meet consumer’s AR demand, and now is the time to act for brands, platforms, and developers.
Introduction
Key Takeaways

AR adoption is tracking with the mobile usage boom - by 2025, over 60% of the Netherlands' population and almost all people who use social / communication apps will be frequent AR users.1

72% of people successfully identify AR when they see it2, but when talking about it, they have a hard time defining or describing what it is.

68% of Snapchatters in the Netherlands and across generations use AR to have fun; the majority are discovering AR through social / communications apps.3

AR is generally seen as a “toy”, but 76% of people expect and desire to use it as a practical “tool” in their everyday lives.4

Interacting with products that have AR experiences leads to a 94% higher conversion rate.5

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1. See additional methodology details in appendix.
2. 2021 Global Deloitte Digital Study commissioned by Snap Inc.
3. Base = Aggregate average (n=741)
5. 68% of Snapchatters in the Netherlands and across generations use AR to have fun; the majority are discovering AR through social / communications apps.
6. 72% of people successfully identify AR when they see it, but when talking about it, they have a hard time defining or describing what it is.
7. 68% of Snapchatters in the Netherlands and across generations use AR to have fun; the majority are discovering AR through social / communications apps.
8. AR adoption is tracking with the mobile usage boom - by 2025, over 60% of the Netherlands' population and almost all people who use social / communication apps will be frequent AR users.
9. AR is generally seen as a “toy”, but 76% of people expect and desire to use it as a practical “tool” in their everyday lives.
10. Interacting with products that have AR experiences leads to a 94% higher conversion rate.
There is something really unique happening right now – an incredible number of hobbyists and professionals are using AR. Downloading tools across the Snap AR platform. They’re taking time to learn, they’re curious.”

AR is growing

By 2025, nearly 60% of the Netherlands’ population* and almost all people who use social / communication apps will be frequent AR users.¹

Frequent AR Consumers

Based on people ages 13-69 who use social / communication apps

Eitan Pilipski
SVP Camera Platform
Snap Inc.

¹ Global population includes people ages 13-69 (based on UN World Population Prospects 2019)
² 2021 AR Consumers based on people who use AR weekly or daily from 2021 Global Deloitte Digital Study commissioned by Snap Inc.
³ 2022 to 2025 forecasted to be new, 2000-2003 growth rate of smartphone users since AR is in the Toy-phase of adoption. This is akin to the era when the first cell phone was released (1997: Nokia 6110 device released, 1999: emojis were invented, 2000: Nokia 3310 launched, and the first commercially available camera phone was launched in Japan).
Younger generations and Snapchatters are driving AR growth

Age Differences

Younger people are 66% more likely to use AR,¹ and they are 35% more likely to believe AR is important in their lives.²

But, AR is not just for Gen Z; Millennials and Gen X show the highest affinity for AR.³

Snapchatters are 2.5x as likely to use AR frequently compared to Non-Snapchatters.⁴

Almost 60% of Snapchatters believe AR is important to their lives.⁵

¹: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Age 13-17 (n=59), Age 18+ (n=176)
²: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Age 13-17 (n=99), Age 35-44 (n=82)
³: Publicis Groupe & Snap Inc. Study Base: Gen Z (n=1,261), Millennials (n=1,632), Gen X (n=1,107)
⁴: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Snapchatters (n=294)
⁵: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Snapchatters (n=169), Non-Snapchatters (n=66)
“As AR evolves, it will revolutionize our lives and will become as significant of a technology shift as the web or mobile was to society, changing how we view and interact with the world around us.”

Allan Cook
Digital Reality Business Leader
Deloitte Digital
AR’s Impact on Brands
A lot of people are using AR to make purchase decisions... and plan to keep doing so

There are 100 million consumers shopping with AR online and in-stores.¹

93% of Snapchatters agree they’ll use AR the same or more when shopping next year.²

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¹ Gartner Press Release
² 2021 Global Deloitte Digital Study commissioned by Snap Inc.
Base = Snapchatters (n=218)
Q: Will you use AR while browsing and/or shopping more or less than last year?
AR captures consumer attention

AR delivers almost **2x** the levels of visual attention compared to their non-AR equivalent,

leading to improved memories and more powerful responses from consumers.¹

Snapchatters who frequently use AR with their family and friends are **87% more likely** to pay attention to a brand.²

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¹: Zappar Article, “How augmented reality affects the brain.”
²: 2021 Global Deloitte Digital Study commissioned by Snap Inc.
Base = Snapchatters with over 40% of friends and family sharing AR (n=77), Snapchatters with less than 40% of friends and family sharing AR (n=54)

Q: How many of your friends and family do you think use AR today? | Q: Sometimes brands will create AR experiences through an app camera (e.g., a big movie company makes an AR experience where the heroes of a movie are fighting next to you, or a restaurant provides you with a lens/filter/effect that turns you into a hamburger). What impact, if any, do you think interacting with that AR experience has on your perception of that brand?
Brands and people connect better with AR experiences

more likely to be considered if they have a branded AR experience.\(^1\)

Snapchatters are 57% more likely than Non-Snapchatters to share a brand’s AR experience with friends and family.\(^2\)

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\(^1\) 2021 Global Deloitte Digital Study commissioned by Snap Inc.

Base: People who use AR all the time (n=72)

Q: How familiar are you with AR?

A: I use AR all the time

Q: Sometimes brands will create AR experiences through an app camera (e.g., a big movie company makes an AR experience where the heroes of a movie are fighting next to you, or a restaurant provides you a lens/filter/effect that turns you into a hamburger). What impact, if any, does interacting with that AR experience have on your perception of that brand?

A: I am more likely to pay more attention to the brand, I am more likely to share a brand’s AR experience with friends and family, I am more likely to consider their products

\(^2\) Base: Snapchatters (n=166), Non-Snapchatters (n=105)

Q: Sometimes brands will create AR experiences through an app camera (e.g., a big movie company makes an AR experience where the heroes of a movie are fighting next to you, or a restaurant provides you a lens/filter/effect that turns you into a hamburger). What impact, if any, does interacting with that AR experience have on your perception of that brand?

A: I am more likely to share a brand’s AR experience with friends and family, I am more likely to be considered if they have a branded AR experience.
AR builds consumer confidence

46% of Snapchatter shoppers agree that AR gives them more confidence about product quality.¹ + Over half of people want to use AR technology to assess products, allowing for a risk free, “try-before you buy”, experience.²

Nearly 3 in 4 consumers say they're willing to pay more for a product that promises the total transparency that AR can provide.³

Returns are a $550 billion problem, which AR can help fix. AR-guided purchases led to a 25% decrease in returns.⁴

¹ 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Snapchatters (n=238). Q: How does AR impact your browsing and/or shopping experience?
² NielsenIQ Analysis, Augmented retail: The new consumer reality
³ 2016 Label Insight Transparency ROI Study via Inc.
⁴ AR Insider Article, “Does AR Really Reduce eCommerce Returns?”
The results are in 🎉
AR interactions drive conversion

The conversion rates that we’ve seen have surprised us, as a result we’re doubling-down on AR experiences to drive eCommerce."

Robert Triefus
EVP of Brand & Customer Engagement
Gucci

Interacting with products that have AR experiences leads to a 94% higher conversion rate, as individuals can better assess them and feel connected with brands.¹

Snapchatters are 37% more likely to purchase products through a brand’s website than Non-Snapchatters.²

2. 2021 Global Deloitte Digital Study commissioned by Snap Inc.

VS.

Snap Inc.
AR connections drive revenue

Consumers who interact with a brand's AR experience are...

<table>
<thead>
<tr>
<th>26%</th>
<th>20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>more likely to share the experience with family and friends¹</td>
<td>more likely to purchase products from the brand²</td>
</tr>
</tbody>
</table>

¹: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base: Aggregate (n=271)
Q: Sometimes brands will create AR experiences through an app camera (e.g., a movie company makes an AR experience where the heroes of a movie are fighting next to you, or a restaurant provides you a lens/filter/effect that turns you into a hamburger). What impact, if any, does interacting with that AR experience have on your perception of that brand? | A: I am more likely to share a brand's AR experience with friends and family
²: Base = Aggregate (n=203)
Q: Same as above | A: I am more likely to purchase their products through the brand's app where I saw the brand's AR experience

Snapchatters are 90% more likely than Non-Snapchatters to use AR to connect with others.²

Snapchatters share AR photos and videos with friends and/or family 94% more than Non-Snapchatters.³
AR is Evolving Fast
On Snapchat, there are **500 million minutes** of AR playtime per day on average.\(^2\)

**Over 8 Million** AR photos and / or videos are taken daily by consumers.

AR use will grow with an increase in awareness and access to AR experiences and content.

**AR Photos / Videos Per Day\(^1\)**

**Generational Breakout of Daily AR Photos / Videos Created**

<table>
<thead>
<tr>
<th>Year</th>
<th>Gen Z</th>
<th>Millennials</th>
<th>Gen X</th>
<th>Boomers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>8.4M</td>
<td>11.3M</td>
<td>5M</td>
<td>31.0M</td>
</tr>
<tr>
<td>2022</td>
<td>9.1M</td>
<td>11.3M</td>
<td>5M</td>
<td>31.0M</td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td>11.3M</td>
<td>5M</td>
<td>31.0M</td>
</tr>
<tr>
<td>2024</td>
<td></td>
<td></td>
<td>5M</td>
<td>31.0M</td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
<td>5M</td>
<td>31.0M</td>
</tr>
</tbody>
</table>

\(^1\) See additional methodology details in appendix; CAGR: 4-year compounded annual growth rate that measures the annual increase in AR Photos / Videos per day from 2021 to 2025

\(^2\) Snap Inc. internal data Q1 2020.

\(+40\%\) 2021-2025 CAGR of AR Photos / Videos per Day.\(^1\)
AR is Here Today and Here to Stay
Where do Snapchatters use AR most today?

68% of Snapchatters use AR primarily in their homes.¹

Snapchatters predominantly use AR at home and do so for a wide range of uses.

What are Snapchatters using AR for at home?²

85% Communication
57% Media & Entertainment
53% Gaming
48% Shopping

Today’s use cases most align with activities you would do at home, and 95% of Snapchatters say they will use AR at home more than last year.³

¹ Base = Snapchatters (n=340) of Snapchatters use AR primarily in their homes.
² Base = Snapchatters at home – Communication (n=290), Media & Entertainment (n=195), Gaming (n=181), Shopping (n=162)
³ Base = Snapchatters (n=493)

Note: Across all 15 markets, the 2021 Global Deloitte Digital Study commissioned by Snap Inc in field from February 23, 2021 to April 5, 2021. Since the survey was conducted during the COVID-19 pandemic, primary usage of AR in consumers’ homes may be higher than normal.

Today’s use cases most align with activities you would do at home, and 95% of Snapchatters say they will use AR at home more than last year.³
How are Snapchatters learning about AR?

Snapchatters are almost 33% more likely to discover AR through social media, communication, and camera apps than Non-Snapchatters.¹

Snapchatters who use AR frequently are more likely to have **over 40%** of their friends and family using AR.²

Learn about AR from social / communication channels and networking.¹

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¹ 2021 Global Deloitte Digital Study commissioned by Snap Inc.
² 2022 Global Deloitte Digital Study commissioned by Snap Inc.
³ 2023 Global Deloitte Digital Study commissioned by Snap Inc.
Why do they use AR?

TECH: OSMOSIS  "I didn’t even realize I was using it"

TOY: JOY  "I want to have fun and connect with friends"

TOOL: UTILITY  "I need to and it’s useful"

TOTALLITY: UBIQUITY  "It’s everywhere and commonplace"
What are Snapchatters using AR for, today?

Snapchatters frequently use AR for communication (+90%) and gaming (+72%) more than Non-Snapchatters.9

**Communication**
- 86% use
- 49% to be more creative

**Media**
- 66% use
- 43% to make what they are watching more enjoyable

**Gaming**
- 58% use
- 43% to make gameplay more interactive

**Shopping**
- 57% use
- 37% to try products out

---

1: 2021 Global Deloitte Digital Study commissioned by Snap Inc.
2: Base = Snapchatters (n=446)
3: Base = Snapchatters (n=339)
4: Base = Snapchatters (n=315)
5: Base = Snapchatters (n=295)
6: Base = Snapchatters (n=130)
7: Base = Snapchatters (n=103)
8: Base = Snapchatters (n=106)
9: Base = Snapchatters – Communication (n=115), Non-Snapchatters – Communication (n=58), Snapchatters – Gaming (n=123), Non-Snapchatters – Gaming (n=61)
What are Snapchatter shoppers using AR for, today?¹

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>81%</td>
</tr>
<tr>
<td>Home Décor</td>
<td>80%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>72%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>67%</td>
</tr>
<tr>
<td>Restaurant &amp; Food Delivery</td>
<td>64%</td>
</tr>
<tr>
<td>Beauty and Wellness</td>
<td>62%</td>
</tr>
<tr>
<td>Household goods</td>
<td>61%</td>
</tr>
<tr>
<td>Automotive</td>
<td>58%</td>
</tr>
</tbody>
</table>

¹ 2021 Global Deloitte Digital Study commissioned by Snap Inc.

Base = Snapchatters – Retail (n=188), Beauty and wellness (n=144), Household goods (n=142), Telecommunications (n=146), Restaurants / food delivery (n=149), Entertainment (n=167), Home décor (n=187), Automotive (n=135), Travel (n=152)
What are Snapchatter shoppers using AR for, today?¹

AR is a natural extension of the shopping experience, aiding in decision making

Shopping and browsing is the main way shoppers discover AR, with 37% discovering that way¹

74% of shoppers are likely to use AR when they come across it²

40% help shoppers decide what to buy³

¹: 2021 Global Deloitte Digital Study commissioned by Snap Inc.
Base = Snapchatters (n=86)
Q: How have you found AR while browsing and/or shopping?
²: Base = Snapchatters (n=172)
Q: If you come across AR while browsing and/or shopping, how likely are you to try it? A: Somewhat/Very likely
³: Base = Snapchatters (n=94)
Q: How does AR Impact your browsing and/or shopping experience?
Almost 3 in 4 Snapchatters believe that AR will be even more important in their lives in the next 5 years.¹

Next year, Snapchatters plan on using AR more in 4 key growth areas.

- **46%** want to readily view information about an item or product as soon as it’s scanned with the phone camera.⁶
- **40%** want to project their AR avatar into their favorite games, media & entertainment.⁸
- **30%** want to create their own interactive media plots by guiding characters through a script.⁵
- **34%** want to customize environments to their own imagination and share with others.⁶

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¹: 2021 Global Deloitte Digital Study commissioned by Snap Inc.
Base = Snapchatters (n=360)
Q: How useful and/or important do you think AR will be in 5 years? | A: Very useful / important, Somewhat useful / important
²: Base = Snapchatters (n=104)
Q: Will you use AR while browsing and/or shopping more or less than last year?
3: Base = Snapchatters (n=99)
Q: Will you use AR in gaming more or less than last year?
4: Base = Snapchatters (n=91)
Q: How would you like to use AR in the next year to enhance the way you view sports, concerts, movies, and TV?
5: Base = Snapchatters (n=76)
Q: How do you feel about AR on social media, communication, and camera apps? | A: I want more ways to interact with friends and family using AR
6: Base = Readily view information about item or product (n=164), Project through AR avatar (n=143), Customize environments (n=124), Create TV/Movie/Video plot narratives (n=108)
Q: Below is a list of ways you could use AR in the future. Please select all the ways that you would be interested in using AR.

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Almost 3 in 4 Snapchatters believe that AR will be even more important in their lives in the next 5 years.¹

Next year, Snapchatters plan on using AR more in 4 key growth areas.
Utility is a primary driver for Snapchatters’ future AR usage¹

1: 2021 Global Deloitte Digital Study commissioned by Snap Inc.

<table>
<thead>
<tr>
<th>Q: Why use AR</th>
<th>Q: Desire for more AR use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellness</td>
<td>241%</td>
</tr>
<tr>
<td>Navigation</td>
<td>43%</td>
</tr>
<tr>
<td>Instructions</td>
<td>52%</td>
</tr>
<tr>
<td>TV &amp; Sports</td>
<td>71%</td>
</tr>
<tr>
<td>Communicate</td>
<td>6%</td>
</tr>
<tr>
<td>Improve Shopping</td>
<td>21%</td>
</tr>
<tr>
<td>Learn Something New</td>
<td>32%</td>
</tr>
</tbody>
</table>

¹ Why use AR (Q1): Desires for future AR use
Consumers are becoming creators

Everyday consumers have more access to technology tools that enable them to be creators of digital content.

AR is a creative vehicle

<table>
<thead>
<tr>
<th>62%</th>
<th>53%</th>
</tr>
</thead>
<tbody>
<tr>
<td>believe AR allows them to be more creative.¹</td>
<td>believe they are AR creators in their everyday lives.²</td>
</tr>
</tbody>
</table>

Snapchatters are 1.6x as likely to be AR creators.³

66%

Snapchatters

41%

Non-Snapchatters

Have you ever used tools (e.g. Snapchat Lens Studio, Facebook for Developers/Spark AR, Instagram for Developers, TikTok for Developers) to create your own AR filters/lenses/effects? | A: Yes

27%

Snapchatters are 1.6x as likely to be AR creators.³

66% vs. 41%

Snapchatters vs. Non-Snapchatters have used tools to create AR.

¹: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Aggregate (n=642) Q: How much do you agree or disagree with each of the statements below? AR allows me to be more creative.

²: Base = Aggregate (n=548), Snapchatters (n=339), Non-Snapchatters (n=209) Q: Have you ever used tools (e.g. Snapchat Lens Studio, Facebook for Developers/Spark AR, Instagram for Developers, TikTok for Developers) to create your own AR filters/lenses/effects? A: Yes

³: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Aggregate (n=548), Snapchatters (n=339), Non-Snapchatters (n=209) Q: How much do you agree or disagree with each of the statements below? AR allows me to be more creative.
Conclusion

Consumers continuously expect more personalized and engaging experiences that enable them to interact with the world. **AR is delivering that to consumers, today, but there remains untapped potential for so much more.**

Brands know the consumer appetite for AR is already here – consumers are far more likely to pay attention to brands using AR. There is a content imperative for brands to meet consumers AR demand, and now is the time to meet this demand. Brands that meet the demand for AR experiences may be more likely to gain market share in the future.

The convergence of use cases and the networking effects is expediting AR adoption. But to unlock AR’s potential, **brands, developers, and platforms need to work together to accelerate content development and grow the AR ecosystem.**
Thank you
Appendix
Consumers are redefining the digital experience by using AR.

Augmented Reality (AR) is the next form of mobile engagement that is exciting consumers, driving an enhanced engagement with brands, elevating consumer experiences and increasing brand revenues.

Augmented Reality refers to experiences in which the real-world environment seen through your phone, computer, app camera, or an AR headset is altered or enhanced with the addition of images, objects, text, or other digitally-added information. Augmented Reality could be applied to both visuals of the front facing (selfie) and outward facing (world) cameras.¹
Report Methodology

Research Overview
Netherlands Report, Quantitative Online Survey
- 20-minute online survey among 15,000 international respondents
- Survey in field from February 23, 2021 – April 5, 2021

Alignment with Interdisciplinary Experts
- Experts within the AR industry participated in in-depth interviews to provide context for survey findings and contribute guidance on the future of AR in society.

Respondent Qualification
- n=1000 per market
  - Ages 13-50
  - 500 Snapchatters who use Snapchat at least once daily, split evenly amongst age groups 13-17, 18-24, and 25-50
  - To ensure a representative read on Snapchatters, cell weighting based on nested gender and age were applied to each country to correct for demographic imbalances due to set sampling size.
  - 500 Non-Snapchatters, who do not have Snapchat downloaded/have never heard of Snapchat, minimum of N=100 in all three age groups
- Markets: Australia, Canada, France, Germany, India, Japan, Malaysia, Mexico, The Netherlands, Norway, Saudi Arabia, Sweden, United Arab Emirates, United States, United Kingdom

Local Market Additions and Exceptions
- US: Ethnicity quota (maximum 65% white respondents, maintained only for Snapchatters; Non-Snapchatters sample should be roughly nationally representative)
- KSA and UAE: Representative expat / citizen quotas (88% expat in UAE; 30% expat in KSA for both Snapchatters and Non-Snapchatters).
- Norway: Sample recruited for n=1000 to be representative of social media and communication app users in that market, with a skew on ages reflective of other markets (evenly distributed across 13-17, 18-24, and 25-50)
- Japan: Sample recruited for n=1000 to be representative of smartphone users in that market, with a skew on ages reflective of other markets (evenly distributed across 13-17, 18-24, and 25-50)
# Frequent AR Users Methodology

## 2021 Baseline

### Frequent AR Users

People who use AR weekly or daily based on responses to 2021 Global Deloitte Digital Study commissioned by Snap Inc. and extrapolated to population

### Population Base

- 2021 Global Population Base: People ages 13-69 = 5.61B worldwide in 2020
- 2021 Social and Communications App Population Base: Global Population x Social Media Penetration Rate (48% in 2021) = 2.71B

Note: Assumes no increase or decrease in population. Base from 2021 stays same across five years

### AR Adoption Rate

AR Adoption Rate of Total Population
AR Adoption Rate of Social and Comms App Population

Note: Adoption Rate capped at 100% in out years

## 2022-2025 Forecast

### 2022 Baseline

See above

### 2000 Growth Rate of Smartphone Users

Note: 2021 AR Users is at 1999 smartphone user’s adoption level since AR is in the Toy-phase of adoption; if we look at where this transition took place with mobile phones, one can argue that this was when games like ‘snake’ started being available (e.g., 1997: Nokia 6110 device released, 1999: emojis were invented, 2000: Nokia 3310 launched, and the first commercially available camera phone launched in Japan)

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1. 2021 Global Deloitte Digital Study commissioned by Snap Inc.
2. Base = Aggregated from 2020
3. How often do you use AR for any of the following reasons? Communication
4. Note: Assumes no increase or decrease in population. Base from 2021 stays same across five years
Overall: Calculations were done by age groups in the 2021 Global Deloitte Digital Study commissioned by Snap Inc. and netted up into a generational view. The following methodology was used for each age group (Ages: 13-17, Ages 18-24, Ages: 25-34, Ages: 35-44, Ages: 45-50).

### 2021 and 2022 Baselines

#### Step 1: Determine Global Population for ages 10-69 (5.99B)¹

**Note:** Survey only included Ages 13-50. Ages 10-12 were assumed to have similar behavior to Ages 13-17. Ages 51-69 were assumed to have similar behavior to Ages 45-50.

#### Step 2: Determine percent of people within crosstab of survey questions for Frequency of photos/videos taken daily AND % of photos/videos that are AR.

**Note:** 2021 based on responses to behaviors today. 2022 based on responses to behaviors next year.

#### Step 3: Apply percent of population from Step 2 to population to get number of people within each crosstab.

#### Step 1: Identify scenarios for number of photos and or videos taken daily

**Note:** Since the survey had ranges (few than 5, 5-10, 10 or more), to determine the number of photos, we developed a low, mid, high case.

- **Low:** assumes lowest quantity in each range (1,5,10)
- **Mid:** assumes average of low and high case (2.5, 7, 12)
- **High:** assumes highest quantity in each range (5, 10, 14)

14 was used as a cap for high case to keep daily photos at a reasonable amount for an average user.

#### Step 2: Select case to apply to analysis

**Note:** High case was chosen based on input from Snap Inc.

#### Step 3: Apply adjustment factor to correct for people who are using AR but may not realize it

**Note:** Based on 2021 Global Deloitte Digital Study commissioned by Snap Inc., it was discovered that ~13% of respondents who use AR could not successfully identify AR >50% of the time.²

### 2023-2025 Forecast

**2022 Baseline**

**2007 Growth Rate of Smartphone Device Sales**

**Note:** Device growth is used as a proxy for photos/videos growth. Growth rate assumes 2007 smartphone device growth. As of 2021, there are ~1.05B AR Compitable Devices: ARCore (Android)³ + ARKit (iOS)⁴. If this grows at global smartphone growth equivalent, there could be ~4.1B by 2025.

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² 2021 Global Deloitte Digital Study commissioned by Snap Inc.
³ AR Insider Article, “ARCore Reaches 400 Million Devices”
⁴ Statista Research, “Augmented reality (AR) and virtual reality (VR) headset shipments worldwide 2020-2025”
<table>
<thead>
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<td>Spain</td>
<td>Deloitte</td>
<td>2/16/2021</td>
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<td>2/16/2021</td>
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## Expert Interviews

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