The following report is a deep dive into how Snapchatters are using AR in the United Arab Emirates 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, 65% of the Gen Z and Millennial population in the UAE will be frequent AR users.¹

73% 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.

63% of Snapchatters in the UAE 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 78% 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=756)
⁴ IBM Digital Evolution 2021 report
⁵ Harvard Business Review article, “How AR Is Redefining Retail in the Pandemic”
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, **65%** of the UAE’s population* and almost all people who use social / communication apps will be frequent AR users.¹

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† See additional methodology details in appendix.

*Global population of Gen Z and Millennials includes people ages 13-44 (based on UN World Population Prospects 2019) who have smartphones (based on Statista Digital Market Outlook).

Note: 2021 AR Consumers based on people who use AR weekly or daily from 2021 Global Deloitte Digital Study commissioned by Snap Inc.

2022 to 2025 forecasted to be with 2000-2003 growth rate of smartphone users since AR is at the ‘Toy-phase of adoption’ of AR users where this transition took place with mobile phones, e.g. one argues Redbox 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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**Frequent AR Consumers**

Based on people ages 13-44 who have smartphones

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Eitan Pilipski  
SVP Camera Platform  
Snap Inc.

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¹ Eitan Pilipski  
SVP Camera Platform  
Snap Inc.

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Based on people ages 13-44 who have smartphones
Younger generations and Snapchatters are driving AR growth

Age Differences

Younger people are 22% more likely to use AR,¹ and they are 15% 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 1.5x as likely to use AR frequently compared to Non-Snapchatters.⁴

71% 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=65), Age 18+ (n=276) Q: How familiar are you with AR? | A: I use AR all the time

²: Base = Age 13-17 (n=117), Age 35-44 (n=176) Q: I see AR everywhere / I don’t see AR anywhere | A: Agree much more with A, Agree somewhat more with A

³: Publicis Groupe & Snap Inc. Study Base: Gen Z (n=1,261), Millennials (n=1,632), Gen X (n=1,107) QP7A: Thinking about your expected use of AR technology post-COVID, do you expect to start using AR? Please select one response

⁴: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Snapchatters (n=203), Non-Snapchatters (n=137) Q: How familiar are you with AR? | A: I use AR all the time

⁵: Base = Snapchatters (n=369) Q: AR is important to me / AR is not important to me | A: Agree much more with A, Agree somewhat more with A
“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

94% of Snapchatters agree they'll use AR the same or more when shopping next year.²

¹ Gartner Press Release
² 2021 Global Deloitte Digital Study commissioned by Snap Inc.
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 26% more likely to pay attention to a brand.²

¹: Zappar Article, “How augmented reality affects the brain”
²: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Snapchatters with over 60% of friends and family sharing AR (n=69), Snapchatters with less than 40% of friends and family sharing AR (n=71)

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 a lens/filter/effect that turns you into a hamburger). What impact, if any, does interacting with the AR experience have on your perception of that brand?
Brands and people connect better with AR experiences

43%

more likely to be considered if they have a branded AR experience.¹

Snapchatters are 23% more likely than Non-Snapchatters to share a brand’s AR experience with friends and family.²

¹ 2021 Global Deloitte Digital Study commissioned by Snap Inc.
² Base = Snapchatters (n=125), Non-Snapchatters (n=102)

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 movie studio creates an AR experience where the heroes of a movie are fighting near you, or a restaurant creates a lens/filter/effect that can turn 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

Q: How does AR impact your communication experience? Please select all that apply.
AR builds consumer confidence

65% 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
The results are in 🥁
AR interactions drive conversion

The conversion rate of our lens product was very high with **62% of those who used AR lens ending up buying** a product.”

Alice Bezirard-Fischer
Communications Lead
Wella

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 **22% more likely** to purchase products through a brand’s website than Non-Snapchatters²
AR connections drive revenue

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

42% more likely to share the experience with family and friends

38% more likely to purchase products from the brand

• Snapchatters are 29% more likely than Non-Snapchatters to use AR to connect with others.

• Snapchatters share AR photos and videos with friends and/or family 46% more than Non-Snapchatters.
AR is Evolving Fast
On Snapchat, there are **500 million minutes** of AR playtime per day on average.  

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

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**Over 8 Million**

AR photos and / or videos are taken daily by consumers

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**+40%**

2021-2025 CAGR of AR Photos / Videos per Day.\(^1\)

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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.
AR is Here Today and Here to Stay
Where do Snapchatters use AR most today?

54% 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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>91%</td>
</tr>
<tr>
<td>Media &amp; Entertainment</td>
<td>78%</td>
</tr>
<tr>
<td>Gaming</td>
<td>75%</td>
</tr>
<tr>
<td>Shopping</td>
<td>70%</td>
</tr>
</tbody>
</table>

Today’s use cases most align with activities you would do at home, and 62% of Snapchatters say they will use AR at home more than last year.³

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 across consumers’ homes may be higher than normal.

¹ Base = Snapchatters (n=272)
² Base = Snapchatters at home – Communication (n=246), M&E (n=213), Gaming (n=204), Shopping (n=189)
³ Base = Snapchatters (n=320)
How are Snapchatters learning about AR?

87%

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

Snapchatters who use AR frequently are more likely to have over 50% of their friends and family using AR.²

¹ 2021 Global Deloitte Digital Study commissioned by Snap Inc.
² 2021 Global Deloitte Digital Study commissioned by Snap Inc.
³ 2021 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”

**TOTALITY:** UBIQUITY  
“It’s everywhere and commonplace”
What are Snapchatters using AR for, today?

**Communication**
86% frequently use

44% to be more creative

**Media**
74% frequently use

57% to make what they are watching more enjoyable

**Gaming**
68% frequently use

47% to make gameplay more interactive

**Shopping**
60% frequently use

41% to try products out

Snapchatters frequently use AR for communication (+30%) and gaming (+18%) more than Non-Snapchatters.9

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1: 2021 Global Deloitte Digital Study commissioned by Snap Inc.
2: Base = Snapchatters (n=443)
3: Base = Snapchatters (n=384)
4: Base = Snapchatters (n=351)
5: Base = Snapchatters (n=311)
6: Base = Snapchatters (n=111)
7: Base = Snapchatters – Communication (n=182), Non-Snapchatters – Communication (n=141), Snapchatters – Gaming (n=180), Non-Snapchatters – Gaming (n=147)
8: Base = Snapchatters (n=143)
9: Base = Snapchatters (n=119)
10: Base = Snapchatters – Communication (n=101)

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**Q: Frequency of Use by Reason: Communication | A: Several times each day, Once a day, Several times a week, Once a week**

**Q: Frequency of Use by Reason: Media | A: Several times each day, Once a day, Several times a week, Once a week**

**Q: Frequency of Use by Reason: Gaming | A: Several times each day, Once a day, Several times a week, Once a week**

**Q: Frequency of Use by Reason: Shopping | A: Several times each day, Once a day, Several times a week, Once a week**

**Q: How does AR impact your communication experience?**

**Q: How does AR impact your entertainment experience?**

**Q: How does AR impact your gaming experience?**

**Q: How often do you use AR when connecting with friends and/or family?**

**Q: How often do you use each type of AR when gaming? – Social media, communication, and camera apps that base AR games in a physical world**
## What are Snapchatter shoppers using AR for, today?¹

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Using AR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>87%</td>
</tr>
<tr>
<td>Home Décor</td>
<td>86%</td>
</tr>
<tr>
<td>Restaurant &amp; Food Delivery</td>
<td>85%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>83%</td>
</tr>
<tr>
<td>Beauty and Wellness</td>
<td>83%</td>
</tr>
<tr>
<td>Travel</td>
<td>82%</td>
</tr>
<tr>
<td>Household goods</td>
<td>81%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>81%</td>
</tr>
<tr>
<td>Automotive</td>
<td>77%</td>
</tr>
</tbody>
</table>

¹ 2021 Global Deloitte Digital Study commissioned by Snap Inc.
AR is a natural extension of the shopping experience, aiding in decision making.

41% discovered it as part of browsing or shopping\(^1\)

87% of shoppers are likely to use AR when they come across it\(^2\)

52% help shoppers decide what to buy\(^3\)

1: 2021 Global Deloitte Digital Study commissioned by Snap Inc.
Base = Snapchatters (n=102)
Q: How have you found AR while browsing and/or shopping?

2: Base = Snapchatters (n=216)
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=130)
Q: How does AR impact your browsing and/or shopping experience?

What are Snapchatter shoppers using AR for, today?\(^1\)
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.

- **Media**²: 60%
- **Shopping**³: 60%
- **Gaming**⁴: 60%
- **Communications**⁵: 50%

37% want to create their own interactive media plots by guiding characters through a script.⁶

53% want to readily view information about an item or product as soon as it’s scanned with the phone camera.⁸

45% want to project their AR avatar into their favorite games, media & entertainment.⁶

41% 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=438)

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=150)

Q: How would you like to use AR in the next year to enhance the way you view sports, concerts, movies, and TV?

³: Base = Snapchatters (n=150)

Q: Will you use AR while browsing and/or shopping more or less than last year?

⁴: Base = Snapchatters (n=126)

Q: Will you use AR in gaming more or less than last year?

⁵: Base = Readily view information about item or product (n=231), Project through AR avatar (n=199), Customize environments (n=180), Create TV/Movie/Video plot narratives (n=163)

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: 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.
Utility is a primary driver for Snapchatters’ future AR usage\(^1\)

1. 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Snapchatters, Why use AR - Wellness (n=38), Improve Productivity (n=65), Instructions (n=79), Learn something new (n=117), TV & Sports (n=67), Navigation (n=109), Communicate (n=139), Improve Shopping (n=145) | Snapchatters, Desire for more AR use - Wellness (n=142), Improve Productivity (n=156), Instructions (n=179), Learn something new (n=194), TV & Sports (n=98), Navigation (n=187), Communicate (n=184), Improve Shopping (n=180)

Q: Why use AR

- Wellness: 60%
- Improve Productivity: 51%
- Improve Shopping: 36%
- Communicate: 18%
- Navigation: 24%
- Learn Something New: 14%
- Instruction: 15%

Q: Desire for more AR use

- Wellness: 37%
- Improve Productivity: 51%
- Improve Shopping: 36%
- Communicate: 18%
- Navigation: 24%
- Learn Something New: 14%
- Instruction: 15%
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

69% believe AR allows them to be more creative.¹

69% believe they are AR creators in their everyday lives.²

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

74%

Snapchatters

63%

Non-Snapchatters

have used tools to create AR.

1: 2021 Global Deloitte Digital Study commissioned by Snap Inc. Base = Aggregate (n=710). Q: How much do you agree or disagree with each of the statements below? AR allows me to be more creative?

2 and 3: Base = Aggregate (n=707), Snapchatters (n=383), Non-Snapchatters (n=324). 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

163%

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163%

Snapchatters are 1.6x as likely to be AR creators.

74%

Snapchatters

63%

Non-Snapchatters

have used tools to create AR.
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
UAE 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

**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

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)
AR Photos / Videos per Day Methodology

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)
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/and or videos taken daily AND % of photos/and or videos that are AR. 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

2023-2025 Forecast

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 1: Identify scenarios for percent of photos and or videos taken that are AR
Note: Since the survey had ranges (less than 20%, 20-40%, 40-60%, 60-80%, Over 80%), to determine number of photos taken daily that were AR, we developed a low, mid, high case.
Low: assumes lowest quantity in each range (0%, 20%, 20%, 60%, 80%)
Mid: assumes average of low and high case (10%, 30%, 50%, 70%, 90%)
High: assumes highest quantity in each range (20%, 40%, 60%, 80%, 100%)
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.

Step 1: Take annual AR photos and or videos and divide by 365 to get daily AR photos and or videos by age group
Step 2: Add all age groups to get total daily AR photos and or videos

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 Compatible Devices: ARCore (Android) + ARKit (iOS). If this grows at global smartphone growth equivalent, there could be ~4.1B by 2025
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<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
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<th>Company</th>
<th>Date</th>
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