2020 Smartphone launch

July, 2020
**Key Findings**

<table>
<thead>
<tr>
<th>COVID-19</th>
<th>Projections</th>
<th>5G</th>
<th>Query path</th>
<th>Audience insights</th>
<th>Microsoft Audience Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey research shows that most respondents will not feel comfortable in-store shopping this holiday season. Advertisers should prepare for online-heavy shopping. Research also shows that the sale of online handsets drastically increased from 2019 to 2020 with this trend likely to continue. COVID-19 is changing the way Microsoft Network users switch phone brands and use bandwidth.</td>
<td>Non-brand phone searches are expected to nearly double year-over-year (YoY) from positive momentum so far in 2020. While Apple searches are expected to increase, they may not see as big of a spike as device launch 2019. Samsung, however, with multiple 5G devices coming, is predicted to spike slightly higher than 2019. 5G search volume is experiencing the most growth YoY. Searches for older phone models also picked up post-COVID, with this trend expected to continue.</td>
<td>5G is heating up. Carrier associations with 5G is changing as a result of news, paid media, and network development. T-Mobile is growing share of mind. Bing users need more awareness as to why 5G is relevant to them - it may influence decisions to buy 5G products. Apple 5G association continues to be a force and will be even more so post launch, especially with the wave of Super Cycle upgraders deciding what to purchase next.</td>
<td>Post COVID-19 we see non-brand queries increasingly showing up in paths and becoming a larger part of the consumer search journey. Using non-brand strategically to influence a consumer over time to search on your brand will significantly help as paths that start with a brand query will have a much higher probability of that path ending in a click on that brand related query.</td>
<td>The majority of Microsoft Network users are iPhone owners. Additionally, mobile phone customers are also frequently in the market for computers and computer gadgets/gear. Customers in the market for mobile phone service providers are frequently in the market for toys and games. The majority of Microsoft network users are loyal to the smartphone brand they currently own and also price conscious.</td>
<td>The Microsoft Audience Network should be an important part of your activation plan with Microsoft Advertising. Click volume for Tech &amp; Telco advertisers on the Audience Network has grown significantly in 2020. Technology advertisers have experienced a notable lift in Search activity from users who have seen their Audience Network ads. All creative and targeting strategies from Search can be extended for further reach in Native.</td>
</tr>
</tbody>
</table>
1. Summary of findings
2. COVID-19
3. Projections
4. 5G updates
5. Query paths & T-Mobile and Sprint
6. Audience insights and Microsoft Audience Network
Device launch amid the COVID-19 pandemic
How is the pandemic affecting the technology hardware market?
Forecast for U.S. consumer electronic sales for 2020

2020 forecast (in units)

- Laptops: 46-51M
- TVs: 34-37M
- Smartphones: 138-153M

"Estimates are that over 1/3 of iPhones used globally are in "upgrade-window", something Apple are very excited about given increased savings combined with the release of 5G products this Fall."

- www.marketwatch.com

Source: Statista 2020
In 2019 the online share of handset sales was 25% in China and 14% in the U.S. As of April 2020, almost 35% of handset sales have been online in the U.S. compared to ~30% in China.

Retailers should expect that the sale of handsets to continue.
What will it take to get shoppers back in stores?

Customers sentiment on when shopping will resume at local stores

- 91%: Available vaccine and/or drugs to treat
- 91%: No new cases in my country
- 74%: Number of new cases in my country slows
- 62%: Government removes restrictions
- 33%: I’m already comfortable doing this or will be as soon as they reopen
- 4%: I would never do this, even after we return to "normal" times

Shopper sentiment on returning to in-store shopping indicates that retailers and advertisers should plan for online-focused holiday season.

Source: Statista April 2020
U.S. consumers are shopping much less in stores
Data from market research firm CivicScience states that 77% of customers are shopping less in stores while 31% are shopping more online.

Are you shopping in stores (not including for groceries) more or less than you typically would this time of year?
- Much less: 57%
- Somewhat less: 20%
- The same amount: 18%
- Somewhat more: 3%
- Much more: 2%

Are you shopping online (not including for groceries) more or less than you typically would this time of year?
- Much less: 13%
- Somewhat less: 9%
- The same amount: 47%
- Somewhat more: 20%
- Much more: 11%

Source: Data from market research firm, CivicScience April 2020
https://civicscience.com/latest/ for more information
Microsoft Network consumers are attending more virtual events
Thus placing more importance on increased bandwidth, consistent data speeds, and the lack of throttling

Virtual events
23% have attended a virtual event that’s replaced a traditional in person event
A further 32% haven’t attended one yet but will consider it
18-34s have attended virtual events more (30%)
35-54s are more likely to attend in future (35%)

Source: MSN CivicScience US on site user survey 18+ years May-June 20.
The pandemic has changed brand phone loyalties

iPhone users plan to be less loyal while Samsung users increased self-reported loyalty. Also, more people planned to buy smartphones.

Source: MSN Data from market research firm, CivicScience 2019 – July 12, 2020
Next steps

COVID-19

• Ensure proper coverage for shopping campaigns
• Consider conquest terms during launch
• Communicate messaging around unlimited plans and bandwidth
Non-brand phone searches are projected to increase
Non-brand searches relating to mobile devices

Non-brand traffic is projected to be much higher than last year. This is due in large part to increases in nonbrand phone searches so far in 2020, and as we continue to navigate this year, we can expect to see a continuation of that momentum.

Source: Microsoft Advertising Internal Data; January 1, 2018 – June 29, 2020; methodology in notes section

2020 Actuals
2019 Actuals
2018 Actuals
Forecast

+84%
Projected 2020 YoY change from 2019

Disclaimer: Forecasts should be used as directional only and to gauge where volume will be based on the current state of the market (as of the week of 6/29). Due to COVID-19 and market volatility, changes to this projection are highly likely.
Apple searches are expected to increase, but may see a lower spike around their new device launch than last year.

Searches for Apple mobile devices

Sources: Microsoft Advertising Internal Data; January 1, 2018 – June 29, 2020; methodology in notes section

Pre-COVID-19  Post-COVID-19

Usual iPhone launch announcement time frame

Delay of launch will delay the initial spike that begins at announcement and carries iPhone search traffic through the rest of the year. This could impact 2020 metrics all-up.

Disclaimer: Forecasts should be used as directional only and to gauge where volume will be based on the current state of the market (as of the week of 6/29). Due to COVID-19 and market volatility, changes to this projection are highly likely.
Samsung mobile device searches will increase, and if launch dates remain consistent, so will new device traffic. Searches for Samsung Galaxy phones are projected to increase by 18% YoY compared to 2019. Samsung is said to be launching multiple devices this year with 5G, which could contribute to the projected increase in volume this year.

**Disclaimer:** Forecasts should be used as directional only and to gauge where volume will be based on the current state of the market (as of the week of 6/29). Due to COVID-19 and market volatility, changes to this projection are highly likely.

Source: Microsoft Advertising Internal Data; January 1, 2018 – June 29, 2020; methodology in notes section
Pixel is unlikely to see major changes in search traffic without major interest in their new device.

Searches for Google Pixel

Because the Pixel has struggled to compete with the iPhone and Samsung phones, volume around the latest Pixel device should remain consistent with prior years but not hugely increased.

Pre-COVID-19 Post-COVID-19

Pixel 3 launch announcement in Sept. 2018

-31% YoY click growth

+3% Product Ad YoY click growth

-28% Mobile YoY click growth

Disclaimer: Forecasts should be used as directional only and to gauge where volume will be based on the current state of the market (as of the week of 6/29). Due to COVID-19 and market volatility, changes to this projection are highly likely.

Source: Microsoft Advertising Internal Data; January 1, 2018 – June 29, 2020; methodology in notes section
5G traffic continues to steadily increase year over year, and is expected to continue its upward trajectory through 2020.

Searches relating to 5G:

- Rumors about 5G causing COVID-19; discussion of possible Apple 5G phone; uptick in T-Mobile 5G searches

Projected 2020 YoY change from 2019: +127%

Disclaimer: Forecasts should be used as directional only and to gauge where volume will be based on the current state of the market (as of the week of 6/29). Due to COVID-19 and market volatility, changes to this projection are highly likely.

Source: Microsoft Advertising Internal Data; January 1, 2018 – June 29, 2020; methodology in notes section
As searches for new models go up, searches for old models go down; old models did see a spike post-COVID-19.

Searches for the latest phone models vs. older phone models

**Disclaimer:** Forecasts should be used as directional only and to gauge where volume will be based on the current state of the market (as of the week of 6/29). Due to COVID-19 and market volatility, changes to this projection are highly likely.

Source: Microsoft Advertising Internal Data; January 1, 2018 – June 29, 2020; methodology in notes section
Next steps

Projections

- Forecasts show positive momentum in search traffic through the end of 2020, meaning device launch traffic could beat that of previous years and advertisers should plan to meet this demand. Delayed launch dates would likely not impact volume, just prolong the spikes.

- Searches for older phone models changed trajectory (started trending upward) post-COVID-19. This trend is predicted to continue through the end of the year, indicating that advertisers should maintain some focus on older models.
5G update
T-Mobile has gained the most share from AT&T

Search volume share across “carrier 5G” and “carrier 5G network” terms

2018

- ATT: 5%
- SPRINT: 21%
- VERIZON: 72%
- TMOBILE: 2%

2019

- TMOBILE: 26%
- SPRINT: 8%
- ATT: 26%
- VERIZON: 40%

2020

- TMOBILE: 33%
- SPRINT: 8%
- VERIZON: 38%
- ATT: 21%

Source: Microsoft Advertising Internal Data 2019 - June 2020
T Mobile gains the most YoY share

Trended search volume share across “carrier 5G” and “carrier 5G network” terms

Source: Microsoft Advertising Internal Data 2019- June 2020
Anticipation for Apple 5G phones grows in 2020

Search volume share across “brand 5G” and “brand 5G phone” terms

Source: Microsoft Advertising Internal Data 2019- June 2020
Last year Microsoft Network users associated 5G with Apple as much as they did with Samsung

Without launching a 5G handset last year, Apple has an interesting advantage due to this false perception despite Samsung being among the first to offer 5G phones

Apple is also riding momentum from recent rumors of a full line up of 5G iPhones, contributing to the searches for 5G iPhones

Source: MSN Data from market research firm, CivicScience August, 2019
Anticipation for Apple 5G phones grows in 2020

Search volume share across “brand 5G” and “brand 5G phone” terms

Source: Microsoft Advertising Internal Data 2019- June 2020
Preparing for the Apple “super cycle” may help increase 5G demand

Demand steadily rebounded in China in June, and as other nations contain the coronavirus and lift lockdowns, the stage is set for "massive pent up" interest in the iPhone 12...Roughly 350 million of Apple's 950 million iPhones worldwide are set for an upgrade in the fall. With a new range of phones spanning price points and 5G capability, the company is positioned for demand to spike over the next 12 to 18 months

~ Dan Ives, analyst at Wedbush Securities

Source: Ben Wink. (2020, July 13) Apple has a new Street-high price target - and the bullish analyst sees shares leaping 17% on 'massive' iPhone 12 demand
Half of Microsoft Network users require education around 5G

Based on what you currently know about 5G, which of the following benefits do you MOST associate with 5G mobile service?

- Faster downloading / streaming speeds: 30%
- Improved cellular coverage: 24%
- Increased bandwidth: 21%
- Reduced latency (response times): 9%
- Lower battery consumption: 4%
- I've never heard of 5G mobile service: 5%
- None of these: 0%

Source: MSN Data from market research firm, CivicScience August, 2019
Having a 5G phone is unimportant to the majority of Microsoft Network users.

How important is it to you that the next phone you get is 5G-enabled?

- Extremely important: 3%
- Very important: 7%
- Somewhat important: 22%
- Not very important: 32%
- Not at all important: 36%

Margin of error +/- 3%

Source: MSN Data from market research firm, CivicScience August, 2019
5G may not be important due to the lack of awareness around 5G
Those who stated the importance of 5G in their next phone don’t know the benefits of 5G

Source: MSN Data from market research firm, CivicScience August, 2019
Next steps

5G

- Carriers need to continue their quest to educate, differentiate, and incentivize 5G plans through brand and non-brand efforts.
- Anticipate a big surge in 5G phones as Apple launches its first 5G device – the appetite is already there even without 5G iPhones now. Carriers need to leverage this launch to their advantage.
Query paths
The beginning of a path can illuminate what a consumer will likely click on at the end of their path. This was the result of the 2019 device launch and holiday season.
Over the last 3 years the number of non-brand queries has increased in paths for Telco and OEM’s. Consumers show us non-brand is a significant step in the path to their last click.

### Path starts

| Non-brand | 32% |
| Apple hardware | 26% |
| Postpaid carrier | 23% |
| Samsung hardware | 9% |
| Prepaid carrier | 6% |

### Middle queries

- Non-brand: 32%
- Apple hardware: 26%
- Postpaid carrier: 23%
- Samsung hardware: 9%
- Prepaid carrier: 6%

### Path ends

| Postpaid carrier | 62% |
| Prepaid carrier | 14% |
| Non-brand | 13% |
| Samsung hardware | 2.5% |
| Apple hardware | 7.5% |

### Total query path

When a path starts with a non-brand query:

- Non-brand: 38%
- Apple hardware: 21%
- Postpaid carrier: 24%
- Samsung hardware: 8%
- Prepaid carrier: 6%

Source: Microsoft Advertising Internal Data; July 2019 - December 2019
Consumer interest in Apple continues to be strong through each stage of the path. However, non-brand and Samsung hardware queries are used for cross shopping and research.

<table>
<thead>
<tr>
<th>Path starts</th>
<th>Middle queries</th>
<th>Path ends</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apple hardware</strong></td>
<td>Non-brand 11%</td>
<td>Postpaid carrier 54%</td>
</tr>
<tr>
<td></td>
<td>Apple hardware 60%</td>
<td>Prepaid carrier 9.5%</td>
</tr>
<tr>
<td></td>
<td>Postpaid carrier 17.5%</td>
<td>Non-brand 4%</td>
</tr>
<tr>
<td></td>
<td>Samsung hardware 6%</td>
<td>Samsung hardware 1.5%</td>
</tr>
<tr>
<td></td>
<td>Prepaid carrier 3%</td>
<td>Apple hardware 30%</td>
</tr>
</tbody>
</table>

**Source:** Microsoft Advertising Internal Data; July 2019 - December 2019
Nearly 50% of total queries are on a Samsung hardware query when a path starts with Samsung. Cross shopping of Apple and non-band make up 27% of total queries.

<table>
<thead>
<tr>
<th>Path starts</th>
<th>Middle queries</th>
<th>Path ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samsung hardware</td>
<td>Non-brand 14.5%</td>
<td>Postpaid carrier 51%</td>
</tr>
<tr>
<td></td>
<td>Apple hardware 18.5%</td>
<td>Prepaid carrier 11%</td>
</tr>
<tr>
<td></td>
<td>Postpaid carrier 17%</td>
<td>Non-brand 6%</td>
</tr>
<tr>
<td></td>
<td>Samsung hardware 42%</td>
<td>Samsung hardware 24%</td>
</tr>
<tr>
<td></td>
<td>Prepaid carrier 3.5%</td>
<td>Apple hardware 6.5%</td>
</tr>
<tr>
<td></td>
<td>(4.5% other hardware)</td>
<td>(1.5% other)</td>
</tr>
</tbody>
</table>

Source: Microsoft Advertising Internal Data; July 2019-December 2019
Consumers search half the time on a prepaid carrier query but with significant interest in phones. Over 30% of queries are for non-brand and brand phones searches.

### Path starts
- **Prepaid Carrier**
  - Non-brand: 16%
  - Apple hardware: 17%
  - Postpaid carrier: 19%
  - Samsung hardware: 7.5%
  - Prepaid carrier: 36.5%

### Middle queries

### Path ends

<table>
<thead>
<tr>
<th>Path ends</th>
<th>Total query path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postpaid carrier</td>
<td>Non-brand 25%</td>
</tr>
<tr>
<td>Prepaid carrier</td>
<td>Postpaid carrier 66%</td>
</tr>
<tr>
<td>Non-brand</td>
<td>Prepaid carrier 12%</td>
</tr>
<tr>
<td>Apple hardware</td>
<td>Postpaid carrier 13%</td>
</tr>
<tr>
<td>Postpaid carrier</td>
<td>Samsung hardware 5.5%</td>
</tr>
<tr>
<td>Samsung hardware</td>
<td>Prepaid carrier 17%</td>
</tr>
<tr>
<td>Prepaid carrier</td>
<td>(4% other hardware)</td>
</tr>
</tbody>
</table>

Source: Microsoft Advertising Internal Data; July 2019 - December 2019
Postpaid carrier category makes up most queries overall. However, there is a strong tie with hardware. If a path starts with a carrier it will end with one 6.6 times out of 10.

<table>
<thead>
<tr>
<th>Path starts</th>
<th>Middle queries</th>
<th>Path ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postpaid carrier</td>
<td>Non-brand 12.5%</td>
<td>Postpaid carrier 87%</td>
</tr>
<tr>
<td></td>
<td>Apple hardware 18%</td>
<td>Prepaid carrier 6.5%</td>
</tr>
<tr>
<td></td>
<td>Postpaid carrier 56%</td>
<td>Non-brand 2.5%</td>
</tr>
<tr>
<td></td>
<td>Samsung hardware 6.5%</td>
<td>Samsung hardware 1%</td>
</tr>
<tr>
<td></td>
<td>Prepaid carrier 4%</td>
<td>Apple hardware 2.5%</td>
</tr>
</tbody>
</table>

(3% other hardware)  
(0.5% other)

Source: Microsoft Advertising Internal Data; July 2019-December 2019
Next steps

Query path

• Expand or fortify keyword portfolio to be inclusive of higher volume non-brand terms even more so on influential non-brand terms such as “best smartphones”

• Trend traffic by device does not change much in terms of how the consumer searches. Make sure you are visible on all devices for all keywords

• Showing up for your brands queries are more important than ever before

• During the peak impact of COVID-19 we saw the average query path length shorten to 5 queries. During the holiday and phone launch season of 2019 the average query path length was 25 queries long. Be prepared for either scenario of shorter or longer paths with high keyword coverage and aggressive bids. Shorter paths gives you shorter opportunities to win the last click. Longer paths give you the opportunity to influence the last click.

• Request the top queries in these categories to have expanded coverage in your portfolio
What will happen to query path trends once T-Mobile sunsets Sprint?
The T-Mobile community of queries is strongly tied to prepaid carriers

T-Mobile will sunset the Sprint brand this summer

- Unique to T-Mobile, many consumer queries before and after a T-Mobile are related to other prepaid carriers
- 63% of Sprint subscribers are postpaid while 15% of Sprint subscribers are in prepaid plans
- Churn rate for Sprint prepaid subscribers is nearly 4X greater than postpaid subscribers
- During March, when the COVID-19 pandemic became reality, there was an increase in queries categorized as prepaid and non-brand
- The potential for non-brand and prepaid queries increases if we see a second wave of COVID-19 in the US

Source: Microsoft Advertising Internal Data: July-Dec 2019. Sprint data source: Sprint via Statista March 2020
If the post COVID-19 trend continues, the expectation for query paths related to carriers should show an increase of queries in the non-brand and postpaid carrier categories to fill the Sprint void
Target Overlapping Audiences For More Volume

Consumers In-Market For Your Product...

339,970 users who are In-Market for

/Consumer Electronics/Mobile Phones

...Are Also In-Market For Others

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers &amp; Peripherals</td>
<td>32.14%</td>
</tr>
<tr>
<td>Home &amp; Garden</td>
<td>29.28%</td>
</tr>
<tr>
<td>Telecom/Mobile Phone Service Providers</td>
<td>24.01%</td>
</tr>
<tr>
<td>Apparel &amp; Accessories</td>
<td>20.75%</td>
</tr>
<tr>
<td>Travel</td>
<td>19.15%</td>
</tr>
</tbody>
</table>

Proprietary Microsoft Advertising Source Data
Target Overlapping Audiences For More Volume

Consumers In-Market For Your Product...

4.08M
users who are In-Market for

/Telecom/Mobile Phone Service Providers

...Are Also In-Market For Others

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.41%</td>
<td>/Hobbies &amp; Leisure/Toys &amp; Games</td>
</tr>
<tr>
<td>27.39%</td>
<td>/Apparel &amp; Accessories/Women’s Apparel</td>
</tr>
<tr>
<td>26.86%</td>
<td>/Autos &amp; Vehicles/Auto Parts &amp; Accessories/Wheels &amp; Tires</td>
</tr>
<tr>
<td>25.08%</td>
<td>/Financial Services</td>
</tr>
<tr>
<td>24.90%</td>
<td>/Apparel &amp; Accessories/Activewear</td>
</tr>
</tbody>
</table>

Proprietary Microsoft Advertising Source Data
Target Overlapping Audiences For More Volume

Consumers In-Market For Your Product...

694,280
users who are In-Market for

/Computers & Peripherals/Computers/Tablets & Ultraportable Devices

...Are Also In-Market For Others

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>74.42%</td>
<td>/Computers &amp; Peripherals</td>
</tr>
<tr>
<td>33.12%</td>
<td>/Home &amp; Garden/Home &amp; Garden Services/Yard Garden &amp; Patio</td>
</tr>
<tr>
<td>24.73%</td>
<td>/Home &amp; Garden/Home Decor</td>
</tr>
<tr>
<td>24.20%</td>
<td>/Apparel &amp; Accessories/Shoes</td>
</tr>
<tr>
<td>23.78%</td>
<td>/Home &amp; Garden</td>
</tr>
</tbody>
</table>

Proprietary Microsoft Advertising Source Data
Target Overlapping Audiences For More Volume

Consumers In-Market For Your Product...

1.93M
users who are In-Market for
/Computers & Peripherals/Computers/Laptops & Notebooks

...Are Also In-Market For Others

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.70%</td>
<td>/Home &amp; Garden</td>
</tr>
<tr>
<td>40.76%</td>
<td>/Apparel &amp; Accessories/Clothing</td>
</tr>
<tr>
<td>36.63%</td>
<td>/Sports &amp; Fitness</td>
</tr>
<tr>
<td>36.58%</td>
<td>/Travel</td>
</tr>
<tr>
<td>34.16%</td>
<td>/Arts &amp; Entertainment/Movies &amp; Films</td>
</tr>
</tbody>
</table>
The majority of Microsoft Network users are iPhone users

Which of the following types of smartphones do you currently own?

- Apple iPhone: 38%
- Samsung Galaxy: 24%
- I don't have a Smartphone: 16%
- Other: 10%
- LG: 7%
- Google Pixel: 2%
- Samsung Galaxy note: 4%

Source: MSN Data from market research firm, CivicScience April, 2019 – July 12, 2020
Overall the majority of Microsoft Network users are loyal iPhone users. Though low in number, more iPhone users are willing to switch to other manufacturers than compared to Samsung users.

![Bar chart showing the likelihood of switching to another smartphone between 2019 and 2020](chart.png)

- **I am not planning to switch from my iPhone:** 42% in 2019, 43% in 2020
- **I am not planning to switch from my Samsung Galaxy:** 24% in 2019, 22% in 2020
- **I don't own a smartphone:** 16% in 2019, 19% in 2020
- **My smartphone is neither an iPhone nor a Samsung Galaxy:** 11% in 2019, 11% in 2020
- **I am likely to switch from my iPhone to another manufacturer:** 1.9% in 2019, 1.1% in 2020
- **I am likely to switch from my Samsung Galaxy to another manufacturer:** 1.8% in 2019, 1.0% in 2020
- **I am likely to switch from my iPhone to a Samsung Galaxy:** 1.5% in 2019, 1.4% in 2020
- **I am likely to switch from my Samsung Galaxy to an iPhone:** 1.3% in 2019, 1.0% in 2020

Source: MSN Data from market research firm, CivicScience 2019 – July 12, 2020
The majority of Microsoft Network users are loyal iPhone users

Source: MSN Data from market research firm, CivicScience Jan – July 12, 2020

Which of the following types of smartphone do you currently own?

<table>
<thead>
<tr>
<th>Currently Have</th>
<th>Previously Had</th>
</tr>
</thead>
<tbody>
<tr>
<td>71% iPhone</td>
<td>iPhone</td>
</tr>
<tr>
<td>7% iPhone</td>
<td>Galaxy</td>
</tr>
<tr>
<td>&lt;1% iPhone</td>
<td>Pixel</td>
</tr>
<tr>
<td>5% iPhone</td>
<td>LG</td>
</tr>
<tr>
<td>12% iPhone</td>
<td>Other</td>
</tr>
<tr>
<td>62% Galaxy</td>
<td>Galaxy</td>
</tr>
<tr>
<td>4% Galaxy</td>
<td>iPhone</td>
</tr>
<tr>
<td>&lt;1% Galaxy</td>
<td>Pixel</td>
</tr>
<tr>
<td>10% Galaxy</td>
<td>LG</td>
</tr>
<tr>
<td>13% Galaxy</td>
<td>Other</td>
</tr>
<tr>
<td>23% Pixel</td>
<td>Pixel</td>
</tr>
<tr>
<td>12% Pixel</td>
<td>iPhone</td>
</tr>
<tr>
<td>26% Pixel</td>
<td>Galaxy</td>
</tr>
<tr>
<td>12% Pixel</td>
<td>LG</td>
</tr>
<tr>
<td>17% Pixel</td>
<td>Other</td>
</tr>
<tr>
<td>53% LG</td>
<td>LG</td>
</tr>
<tr>
<td>5% LG</td>
<td>iPhone</td>
</tr>
<tr>
<td>15% LG</td>
<td>Galaxy</td>
</tr>
<tr>
<td>1% LG</td>
<td>Pixel</td>
</tr>
<tr>
<td>16% LG</td>
<td>Other</td>
</tr>
</tbody>
</table>
Microsoft Network users are slightly more likely to buy a foldable phone
32% of Microsoft Network users are interested in purchasing a foldable compared to 30% of the U.S. population

Source: MSN Data from market research firm, CivicScience February, 2020
The majority of Microsoft Network users are price conscious phone buyers. 85% of Microsoft Network users would not purchase a smartphone for $1,000.

Would you pay $1k for a smartphone?

- Yes, and I already have, 9%
- Yes, I would, 4%
- No, probably not, 18%
- No, definitely not, 67%
- Other/No opinion, 1%

Margin of error +/-1%

Source: MSN Data from market research firm, CivicScience February, 2020
Next steps

Audience

• Retarget users who have previously purchased an iPhone or Samsung phone
• Allocate some budget for those who are also looking to switch phone brands and cross shop (conquest)
• Price may be an even bigger selling point for phones this year due to the pandemic, so promotions around key times is essential to growing sales
• Expand your audience targeting to include overlapping interests that may be outside of the scope of technology and devices
Microsoft Audience Network
Meet the **Microsoft Audience Network**

- **Premium native placements**
  - Strict publisher standards and AI-powered curation

- **Brand-safe experiences**
  - Transparency and controls for advertisers

- **Highly contextual ad placements**
  - Based on Microsoft first-party data

- **Strong industry ad performance**
  - Driven by leading-edge AI technology

**Select publisher partners**

- Outlook.com
- Microsoft Edge
- MSN
Drive meaningful connections with your audience

Using Microsoft first-party intent data

Powered by the Microsoft Advertising Graph

1B devices running Windows 10¹

498M monthly unique visitors²

11B global monthly searches²

675M global professionals³

200M monthly unique visitors²

64M monthly unique users²

² comScore, August 2018
³ Omnicore, May 2019
⁴ Microsoft internal data.
Achieve your goals with high-performing ads

Our Audience Ads click-through rates (CTRs) outperform other native platforms delivering ads on the same properties.

- **MSN INFOPANE**: 2x CTR\(^1\)
- **OUTLOOK.COM**: 1.2x CTR\(^2\)
- **PUBLISHER PARTNERS**: 3.5x CTR\(^3\)

---

Microsoft Audience Ads

Adding images and copy to your search campaigns is one of the most important actions you can take to make sure your ads serve on the Microsoft Audience Network.
Microsoft Audience Network exposure drives lift on search for Tech & Telco advertisers

We reach over half a billion people worldwide

Microsoft Search Network + Microsoft Audience Network

+27% lift in impressions post-exposure¹

+47% lift in clicks post-exposure¹

¹ Jan 2019 – Mar 2020; Exposed vs. Control lifts for both clicks and searches per user; Searches based on ad flag for selected advertiser and other advertisers in that vertical. On average, those clients saw the reported lift in Search Impressions per user and reported lift in Search Clicks per user for exposed users compared to those who were not exposed to an ad on the Microsoft Audience Network. This is based on a sample of our pilot advertisers and is not a marketplace lift. The experienced lift is on a per-user basis for the exposed users, not the advertisers’ full search program. Technology & Telecommunications Advertisers
Audience Network click volume continues to trend upward for Tech while CPC improves
All-up Microsoft Audience Network Tech & Telco clicks & CPC trends

Ensure the Audience Network is a part of your Microsoft Advertising plan for 2020 Device Launches

Click volume for Technology & Telecommunications advertisers on the Microsoft Audience Network has seen significant growth in 2020

1. Excludes non-Back-to-School Retail categories
Activate device launch trends across different campaign types and strategies

Activate an important COVID-19 takeaway by featuring differentiation and messaging around cost, speed, and bandwidth

Respond to COVID-19 search trends by reaching users with messaging and promotions in which they’re interested in during increased stay-at-home periods and demand for high speed internet
Activate device launch trends across different campaign types and strategies

Respond to increased demand for high-speed internet and 5G products by promoting your high-speed 5G plans and devices to highly targeted audiences in a premium, visible environment.

Activate an important 5G takeaway by continuing your quest to educate, differentiate, and incentivize 5G plans.
Expand your shopping reach through feed-based shopping native ads

Use your existing Shopping Campaigns feed from search

When combined with Microsoft AI intent signals, we’ll match searchers with the items in your feed that they’ve shown interest in.
Advertisers running **Product Audiences** see a 19% higher lift in clicks compared to the average search lift.

Microsoft internal data, user clusters collected Sept 2019, MSAN Exposure and Search performance tracked Oct-Dec 2019

1. Based on advertisers with shopping feeds who are running Audience campaigns & Product Audiences; lift metrics are not exclusive to Product Audiences.

**Tech & Telco Image Ads lift**
- Impression lift: **27%**
- Click lift: **47%**

**Product Ads lift:**
- Impression lift: **83%**
- Click lift: **95%**
Activate across targeting features to maximize reach and click volume
Apply bid modifiers to individual segments to maintain efficiency

Product Audiences, Device Targeting, and Location Targeting offer the lowest CPC for Technology & Telecommunications advertisers

Remarketing, Product Audiences, and Similar Audiences generate the highest CTR for Technology & Telecommunications advertisers

*Microsoft internal data, 1/1/2020 – 4/25/2020, Microsoft Audience Network, Tech & Telco L1, Technology & Telecommunication L2 Sub-Verticals
Next Steps Summary

**COVID-19**
- Prepare for this holiday season to be online-shopping heavy
- Ensure proper coverage for shopping campaigns
- Consider conquest terms during launch
- Communicate messaging around unlimited plans and bandwidth

**Projections**
Forecasts show positive momentum in search traffic through the end of 2020, meaning device launch traffic could beat that of previous years and advertisers should plan to meet this demand. Delayed launch dates would likely not impact volume, just prolong the spikes.

Searches for older phone models changed trajectory (started trending upward) post-COVID-19. This trend is predicted to continue through the end of the year, indicating that advertisers should maintain some focus on older models.

**5G**
- Expect Hardware and Software conversions to spike together throughout the year, but not necessarily during the holiday months
- Carriers need to continue their quest to educate, differentiate, and incentivize 5G plans through brand and non brand efforts
- Anticipate a big surge in 5G phones as Apple launches its first 5G device – the appetite is already there even without 5G iPhones now. Carriers need to leverage this launch to their advantage.

**Query path**
- Expand or fortify keyword portfolio to be inclusive of higher volume non-brand terms. Even more so on influential non-brand terms such as “best smartphones”.
- Trend traffic by device does not change much in terms of how the consumer searches. Make sure you are visible on all devices for all keywords.
- Showing up for your brands queries is more important than ever before

**Audience insights**
- Take advantage of overlapping audiences to broaden your advertising reach
- Retarget users who have previously purchased an iPhone or Samsung phone
- Allocate some budget for those who are also looking to switch phone brands and cross shop (conquest)
- Price may be an even bigger selling point for phones this year due to the pandemic, so promotions around key times is essential to growing sales

**Microsoft Audience Network**
- Take advantage of a growing network to extend activations into the Microsoft Audience Network
- Promote messaging around cost, plans, and bandwidth as a response to COVID-19
- Reach users who are interested in 5G with your brand’s unique value proposition and differentiation in the 5G space
- Target similar audiences in Microsoft Audience Network as Search, while also testing new segments
Appendix
Just under half of consumers are spending less during the pandemic.

How has the COVID-19 outbreak affected your spending overall?

Source: Data from market research firm, CivicScience Feb-April 2020
https://civicscience.com/latest/ for more information
What are consumers doing with their disposable income during the pandemic?

Monthly % of change in disposable personal income (USA)

-2.1% 12.9%

Apr '19 May '19 Jun '19 Jul '19 Aug '19 Sep '19 Oct '19 Nov '19 Dec '19 Jan '20 Feb '20 Mar '20 Apr '20*

What are people doing with this extra disposable money?

- Personal savings rate hit a historic level of 33% in April
- Personal spending decreased by 13.6%
- Consumers are crediting a combination of unknown circumstances in the near future along with a decrease in opportunities to go out and spend (with businesses closing up... “shopportunities” are limited)

Source: Statista 2020
- www.cnbc.com
Estimated growth of smartphone users in U.S. (in millions)

New user numbers are estimated to continually decline in the years ahead.

Source: Statista 2020
Where customers are starting to bounce back

U.S. customers are becoming more comfortable with low-contact commerce

Who is doing this increase in shopping?

50% of adults between 18 – 44 said they are more comfortable getting takeout in May vs. April, compared to 43% of those aged 45-64, and only 34% of those over 65 years old.

Source: Statista May 2020
How COVID-19 has shifted how people shop in the U.S.

**Items/services shoppers are acquiring online compared to in-store**

- Restaurant delivery / takeaway: 31%
- Hygiene products: 27%
- Clothing: 26%
- Household cleaning products: 26%
- Supermarket food and drink: 24%
- Health products (e.g. medicine): 21%
- Books: 15%
- Hobby supplies: 15%
- Games: 13%
- Consumer electronics, furniture: 11%
- Video: 11%

**Items shoppers say they are spending less on**

- Going out (e.g. restaurants, cinemas): 77%
- Travel (e.g. public transport, vacations): 70%
- Services (e.g. hairdresser): 69%
- Clothing: 49%
- Consumer electronics, furniture: 34%
- Hobbies: 26%
- Investments: 26%
- Food and drinks: 23%
- Childcare: 22%
- Home entertainment (e.g. video, games): 19%
- Insurance: 19%

Source: Statista 2020
Cell phone plans – comparing prepaid to postpaid

U.S. wireless carriers lost 238K prepaid in Q4 of 2019, and over 330K prepaid customers over 2019

Breakdown of postpaid to prepaid customers per carrier

Verizon: 4,646 Postpaid, 17,803 Prepaid
AT&T: 26,861 Prepaid, 4,646 Postpaid
T-mobile: 20,860 Prepaid, 8,266 Postpaid
Sprint: 8,266 Prepaid, 26,264 Postpaid

Soon to be merged
Microsoft Network consumers are split on how they will spend on technology after the pandemic is over

**Home Technology**

47% say they will spend the same or more when the pandemic is over

52% of males / 43% of females agree

35-54s are more likely to spend the same or more as 51% agree

Source: MSN CivicScience US on site user survey 18+ years May-June 20.
Carrier 5G queries remain high in 2020

Source: Microsoft Advertising Internal Data 2019- June 2020
The beginning of a path can illuminate what a consumer will likely click on at the end of their path. This was the result of the 2019 season:

<table>
<thead>
<tr>
<th>Query Type</th>
<th>Postpaid Carrier Clicks</th>
<th>Prepaid Carrier Clicks</th>
<th>Non-Brand Clicks</th>
<th>Samsung Clicks</th>
<th>Apple Clicks</th>
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</thead>
<tbody>
<tr>
<td>Start with “postpaid carrier”</td>
<td>87%</td>
<td>7%</td>
<td>1%</td>
<td>1%</td>
<td>2.5%</td>
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<td>2.5%</td>
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<td>Start with “prepaid carrier”</td>
<td>66%</td>
<td>25%</td>
<td>3%</td>
<td>1%</td>
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<td>Start with “apple hardware”</td>
<td>54%</td>
<td>30%</td>
<td>9.5%</td>
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<td>Start with “samsung hardware”</td>
<td>51%</td>
<td>24%</td>
<td>11%</td>
<td>7%</td>
<td>6%</td>
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<tr>
<td>Start with “non-brand”</td>
<td>62%</td>
<td>14%</td>
<td>13%</td>
<td>8%</td>
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Source: Microsoft Advertising Internal Data: July-Dec 2019