Holiday insights: Hardware & Software

July, 2020
Contents

1. The changing consumer landscape
2. Holiday trends and projections
3. The relationship between Hardware and Software
4. Impact of COVID-19
5. Opportunities for holiday 2020
The changing consumer landscape
How might shifts in the market and consumer behavior impact Holiday 2020?
Most U.S. consumers plan to alter their holiday shopping habits in various ways

51% of respondents expect to begin holiday shopping earlier than normal this year, likely due to expectations for slower or delayed deliveries.

76% of respondents say they intend to purchase more than half of their gifts online (with 62% saying this includes stocking stuffers and last-minute gifts).

57% say gifts will be shipped directly to recipients, more so than last year.

Voxware, June 2020; survey of 500 U.S. consumers
Technology hardware market forecast for 2020

Forecast for U.S. consumer electronic sales for 2020

<table>
<thead>
<tr>
<th>Device</th>
<th>2020 forecast (in units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laptops</td>
<td>46-51M</td>
</tr>
<tr>
<td>TVs</td>
<td>34-37M</td>
</tr>
<tr>
<td>Smartphones</td>
<td>138-153M</td>
</tr>
</tbody>
</table>

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

- www.marketwatch.com
PC demand surged in Q1, but shipments lagged due to supply issues; further drop in sales expected

- Shipment dropped 8% despite surge in demand for new PCs – the worst since a 12% drop in 2016

- The slowdown in supply is met with accelerated demand for remote employees and students

- Only Dell projected positive growth with a modest 1.1% annual rate

- Canalys predicts the rest of the year will see a drop in sales as companies cut back on purchases

Source: Canalys, April 2020 (TechCrunch)
Holiday trends and projections
What trends have we seen in previous holiday seasons, and how might things change?
Older age groups (50+) are more likely to search for Hardware than Software; this is the opposite for younger age groups (below 50)

Age group and device type for holiday 2019, Hardware vs. Software
Apple, Samsung, Xbox products, and “best” terms were most popular searches in the 2019 holiday season
Top hardware queries by search volume in the 2019 holiday season
Google, Microsoft, Adobe, and photo/video editing software terms were most popular searches in the 2019 holiday season

Top software queries by search volume from the 2019 holiday season
Hardware saw a steady increase in search volume post-COVID-19, on par with holiday spikes in 2019

Brand vs. non-brand search volume, Hardware

See slide 31 for a comparison of search volume to seasonal trends.
Product Ad clicks have been above average since April, particularly for Hardware

Clicks on Product Ads over time, Hardware vs. Software
Hardware search traffic is projected to increase, spiking close to the holidays. Combined brand and non-brand searches relating to hardware forecasted through the end of 2020.

Even if the post-COVID-19 surge does not continue at its current pace, previous year trends suggest that the year will still finish out with positive momentum.

Disclaimers: Forecasts should be used as directional only and to gauge where volume will be based on the current state of the market. Due to COVID-19 and market volatility, changes to this projection are highly likely.
Software searches spiked and dipped post-COVID-19, but are expected to increase along with previous year trends. Software brand and non-brand searches forecasted through the end of 2020.

**Comparison of 2018 and 2019 holiday seasons**

- **+13%** Projected 2020 YoY change from 2019 holiday season

**Disclaimer:** Forecasts should be used as directional only and to gauge where volume will be based on the current state of the market. Due to COVID-19 and market volatility, changes to this projection are highly likely.
Relationship between Hardware and Software
How will Hardware trends impact Software, and vice versa?
Hardware and Software conversions are correlated and thus likely to trend together; this correlation is even stronger post-COVID-19

Moderate positive correlation (0.51)
Stronger correlation post-COVID-19 (0.62)
Hardware and Software search volume is slightly correlated, but less than conversions; this correlation is stronger post-COVID-19, but weak during the holiday season.

Slight positive correlation (0.37)
Stronger correlation post-COVID-19 (0.45)
Weak correlation during the holiday season (0.02)

Proprietary Microsoft Advertising Source Data
Most often, Hardware and Software appear in the same query path due to operating system or when choosing browsers to download
Impact of COVID-19
Software and Hardware searches are both trending above normal seasonality and have been since March

Normal search seasonality: Software vs. Hardware
Hardware and Software conversions have grown significantly in 2020 and spiked post-COVID-19

Proprietary Microsoft Advertising Source Data
Opportunities for holiday 2020
Timing opportunities for Hardware: December, January, April, and May provide the most advantageous volume-CPC gaps.

Low average CPCs and high average search results page views (SRPVs), indicating opportunity.

- Better than average

Proprietary Microsoft Advertising Source Data
Timing opportunities for Software: August, September, and April provide the most advantageous volume-CPC gaps

Low average CPCs and high average SRPVs, indicating opportunity

= Better than average
Utilizing audience groups will increase likelihood of searchers clicking, as CTR improves by nearly 20% with audience targeting

Click-through rate for Hardware and Software (combined), with vs. without Audience Targeting
Strategies and recommendations
