Deloitte predicts that one billion smartphones will be purchased as upgrades for the first time in 2015, generating over $300 billion in sales.\textsuperscript{276} We expect smartphone upgrade volumes to continue increasing through 2018, and possibly beyond.

The quantity of smartphones bought as upgrades is unparalleled among consumer electronics devices. In 2015 smartphone sales will be greater in units and revenues than the PC, television, tablet and games console sectors combined (see Figures 3 and 4).\textsuperscript{277} The smartphone’s share of units and revenue should continue growing through 2018.

The smartphone’s predominance is driven mainly by upgrades. The smartphone base is forecast to increase from 1.8 billion in 2014 to 2.2 billion this year.\textsuperscript{278} We expect smartphone sales of about 1.4 billion smartphones in 2015, which implies that just over a billion (about three-quarters) will be upgrades. According to Deloitte’s research, undertaken in May-June 2014, about seven in ten smartphone owners in 14 developed markets had upgraded their phone in the previous 18 months.\textsuperscript{279} This is more frequent than for any other consumer electronics device, which may surprise in view of the fact that in 2015 most smartphone owners are likely to spend more time looking at TV screens, and information workers and students may spend more time looking at PC screens.\textsuperscript{280}

One billion smartphones will be purchased as upgrades for the first time in 2015, generating over $300 billion in sales.

Figure 3. Combined global sales revenue of PCs, smartphones, tablets, TVs and video game consoles, 2013-2018

Revenue ($ billion)

Source: Deloitte, 2014, based on multiple sources


\textsuperscript{277} The 2013-2018 estimates are a combination of published industry forecasts and Deloitte estimates for actual and forecast numbers. Sources used include, but are not restricted to, IDC, Gartner, Canalys, IHS.

\textsuperscript{278} The Mobile Economy 2014 (page 17), GSMA, 2014: http://www.gsmamobileeconomy.com/20000_x12_Report_2014_R2_web0.pdf

\textsuperscript{279} The question asked was: "When did you buy or get given your current phone?" The base for this question was smartphone owners: Australia 1,525; Finland 652; France 1,309; Germany 1,364; Italy 1,515; Japan 887; Netherlands 1,423; Norway 875; Singapore 1,773; South Korea 1,759; Spain 1,763; Sweden 1,491; UK 2,862; US 1,167. The survey is part of the Global Mobile Consumer Survey, a study conducted online by Ipsos MORI on behalf of Deloitte between May-July 2014.

\textsuperscript{280} For more information on time spent with devices in the US, see: The total audience report, Nielsen, 3 December 2014: http://www.nielsen.com/us/en/insights/reports/2014/the-total-audience-report.html
However, the smartphone is the most personal of consumer electronics devices: the most constant companion, the most personal of choices, the most customized and reflective of the owners, the least likely to be shared with other users, and the most frequently looked at.\footnote{According to Deloitte’s Global Mobile Consumer Survey, respondents in 14 developed countries look at their phones, on average, 37 times a day.}

Indeed, our research found that respondents in many countries chose the smartphone as the device they were most likely to purchase in the next 12 months, with a third expecting to buy a smartphone, compared to 21 percent for laptops and 19 percent for tablets (see Figure 5).

The huge production volumes of smartphones manufactured also make this the most competitive market among devices, undergoing the most substantive improvement on a year-by-year basis. Our view is that the device replacement cycle for smartphones is the shortest relative to other devices (see Figure 6).

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\footnote{Source: Deloitte, 2014, based on various industry sources}

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### Figure 4. Combined global sales units of PCs, smartphones, tablets, TVs and video game consoles, 2013-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Smartphones</th>
<th>PCs</th>
<th>TV sets</th>
<th>Tablets</th>
<th>Video game consoles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013A</td>
<td>1,000</td>
<td>1,500</td>
<td>2,000</td>
<td>1,500</td>
<td>1,000</td>
</tr>
<tr>
<td>2014E</td>
<td>2,000</td>
<td>2,500</td>
<td>3,000</td>
<td>2,000</td>
<td>2,500</td>
</tr>
<tr>
<td>2015E</td>
<td>3,000</td>
<td>3,500</td>
<td>4,000</td>
<td>3,000</td>
<td>3,500</td>
</tr>
<tr>
<td>2016E</td>
<td>4,000</td>
<td>4,500</td>
<td>5,000</td>
<td>4,000</td>
<td>4,500</td>
</tr>
<tr>
<td>2017E</td>
<td>5,000</td>
<td>5,500</td>
<td>6,000</td>
<td>5,000</td>
<td>5,500</td>
</tr>
<tr>
<td>2018E</td>
<td>6,000</td>
<td>6,500</td>
<td>7,000</td>
<td>6,000</td>
<td>6,500</td>
</tr>
</tbody>
</table>

Source: Deloitte, 2014, based on various industry sources

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### Figure 5. Device purchase intent in the next 12 months

Q: Which, if any, of the following devices are you likely to buy in the next 12 months?

- **Smartphone**: 32%
- **Laptop**: 21%
- **Tablet**: 19%
- **Smart watch**: 5%
- **Fitness tracker**: 5%
- **eReader**: 5%
- **Smart glasses**: 2%
- **None of these**: 39%

Source: Deloitte Global Mobile Consumer Survey, Developed countries, May - July 2014

Weighted base: All respondents: Australia 2,015; Finland, 1,000; France 2,000; Germany 2,000; Italy 2,000; Japan 2,000; Netherlands 2,000; Norway 1,000; Singapore 2,000; South Korea 2,000; Spain 2,000; Sweden 2,000; UK 4,000; US 2,001
There is a wide spread of motivations, practical and emotional, which will drive the billion upgrades we anticipate for 2015 and the 1.15 billion for 2016.
Better cameras may trigger upgrades to get more memory. Although this may seem logical, it is arguably irrational, if we exhaust memory only because we are averse to deleting un-needed snaps. A 64-gigabyte (GB) phone can store over 30,000 high definition photos, few which will be looked at again.

Some of the practical motivations for upgrading may not be picked up by standard, questionnaire-based market research. A common reason for upgrading in 2015 will be to get a larger screen, ostensibly to browse more easily, or watch more video. Few might admit however that the principal benefit of a larger screen is to avoid the need to put on reading glasses.290

This year, a common complaint among smartphone users will be that their device ‘feels slow’. This will be fact as well as perception: smartphones used frequently for data applications tend to last about four years before becoming too slow to operate.291 Phone hardware is locked down and generally can’t be upgraded; but the software used on the device, including the operating system (OS), is upgraded at least annually. New software, be it an OS or an app, is designed for the majority of phones likely to use it and pay for it. Every year, the newest smartphones incorporate faster processors and more random access memory (RAM); so over time, as software becomes more complex, the processor and memory in a device increasingly struggle to undertake existing and new functions.

Upgrading a smartphone on the basis of looks may seem superficial, but this decision can also be rationalized. Better-quality materials – whether metals, plastics or even bamboo – are now being used, and these can make devices more durable as well as more eye-catching. New screens tend to be stronger, and also to have better viewing angles, as well as superior visibility in sunlight.292 Many smartphone models are now dust – and water-resistant.293

Peer pressure is likely to be a factor in many decisions to upgrade. It’s not just the envy invoked from seeing friends and family with pristine new devices, replete with brand new functionality; it’s also the news flow, with some new smartphone launches dominating the tech sections of websites and also national news bulletins.

Added to that is pestering from children, eager for their parents to upgrade so as to get an upgraded hand-me-down smartphone for themselves.

In many cases, the timing of an upgrade will be linked to the expiry of a contract, a price reduction, or a sales promotion. But the decision to actually upgrade a phone, and the choice of which model to upgrade to, will likely have been driven by many of the aforementioned factors, as well as many other impulses, summarized in Figure 7. Vendors and carriers should be aware of them all.

**Figure 7. Drivers for phone upgrade**

![Diagram showing various factors influencing smartphone upgrade decisions](http://example.com/diagram.png)

Source: Deloitte, 2014

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291. For a discussion on the natural life cycle of devices, see: Why your iPhone or iPad feels like it’s getting slower, ZDNet, 3 September 2016: [http://www.zdnet.com/article/why-your-iphone-or-ipad-feels-like-it’s-getting-slower/](http://www.zdnet.com/article/why-your-iphone-or-ipad-feels-like-it’s-getting-slower/)


Bottom line

The smartphone is the most successful consumer device ever: the landmark of a billion upgrades in a single year is testament to this.

Just being in the smartphone industry, however, is no guarantee of success, and the market is becoming increasingly competitive. The challenges for smartphone vendors: retaining loyalty, taking share in a maturing market, maintaining margin, and determining which functionality their customers want at each point in time, are likely to get steadily more acute over time.

In addition to optimizing hardware, vendors will need to increment the range of intangible factors used to enhance their devices’ appeal. These range from the availability of technical support, to the ease of transferring data between the old and new devices and from the perceived security of client data to the caliber of the accompanying app store.

Vendors need to ensure that all functionality addresses current needs and anticipates latent ones. Incorporating superfluous functionality, or technology that is hard to use, will diminish profitability.

Offering cameras with ever-higher resolution may offer quality increments that few owners would be able to discern; whereas incorporating better low-light capability may have wider appeal, as the improvement would be more immediately noticeable.

Smartphone vendors should continue to work closely with carriers. In markets with subsidies and two-year contracts, upgrades have both advantages and disadvantages for carriers. They need to fund the upfront device cost, or offer the ability to pay in installments, but the upgrade also gives them a chance to lock in a customer, reduce churn and perhaps even sell them upgraded service levels. In markets with no subsidies, the vendors need to optimize pricing and features in order to appeal to retailers and consumers.

For purchases of the few hundred million smartphones by enterprises, the selection process can be more complex than for consumers. CIOs are unlikely to care too much about the need for a smartphone optimized for sharing holiday snaps; but the HR department may want to offer such devices to attract and retain staff. In some cases, phones that are more resilient and waterproof may be perfect for field workers; and for companies needing additional security, fingerprint readers and NFC chips may be of particular interest.