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The Q3 2017 Avast PC Trends Report gives insights into the state of the PC market today: What PCs people use, what software they rely on, what hardware is the most popular & much more.

The PC has survived the age of the smartphone and tablet to remain a productive, reliable powerhouse for work, gaming, and communication. But what is it that users do with PCs in the days of smartphones? What programs and what hardware do users have?

This Q3 2017 Avast PC Trends Report combines data from 155 million users and global statistics to provide a real-world look at PCs and what users do with them.
Installed Programs

The Average User has **51** Programs Installed

The most popular programs include usual suspects like Chrome, Firefox and Skype.

A majority of the top 20 applications (see next page) are needed on a day-to-day basis, such as Adobe Reader, Skype or WinRAR. Other entries in our list, particularly Flash and Java, are required to run other programs or websites. Not all applications are needed on a daily basis, though. Still, over 16% have the remote management tool TeamViewer installed. This is due to TeamViewer’s user growth and integration into globally used services or customer support offers such as ServiceNow, Salesforce, Zendesk, or Microsoft Intune, resulting in an increase in their global user base.

And between 8-10% run a multimedia playback or editing program from Cyberlink, which is due to OEMs, especially HP or Dell, preinstalling Cyberlink products on their laptops and desktop PCs.

Zooming into individual markets, some countries amass software more than others. Korea and Japan top our lists with an average of 79 and 73 applications installed, while on average Pakistanis have 29 and Egyptians have 34 installed on their PC.

**Note:** Excluded here are our own Avast products as they were used to collect the following top 20 data. Competitive products do not show up in this list, either, as customers regular don’t (and should not) have more than one antivirus product running. To understand more about AV marketshare, please refer to the latest OPswat report.
B  Installed Programs

The Top 20 Most Installed PC Programs

Based on statistics from millions of PCs, the number one program is Google Chrome which is installed on 79% of all PCs. The data from 155 million users is in line with Chrome’s **dramatic expansion** in the last 2 years when it rose from 25% in early 2015 to almost 60% in early 2017. The Chrome browser is closely followed by Adobe Flash Player (77%) and Java (59%). One out of 10 PC users are into gaming, as 10% of the PCs have the popular gaming platform Steam installed.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Program</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Google Chrome</td>
<td>79%</td>
</tr>
<tr>
<td>2</td>
<td>Adobe Flash Player</td>
<td>77%</td>
</tr>
<tr>
<td>3</td>
<td>Java</td>
<td>59%</td>
</tr>
<tr>
<td>4</td>
<td>Mozilla Firefox</td>
<td>44%</td>
</tr>
<tr>
<td>5</td>
<td>Skype</td>
<td>39%</td>
</tr>
<tr>
<td>6</td>
<td>Winrar</td>
<td>35%</td>
</tr>
<tr>
<td>7</td>
<td>VLC Media Player</td>
<td>31%</td>
</tr>
<tr>
<td>8</td>
<td>Adobe Reader</td>
<td>27%</td>
</tr>
<tr>
<td>9</td>
<td>CCleaner</td>
<td>23%</td>
</tr>
<tr>
<td>10</td>
<td>iTunes</td>
<td>19%</td>
</tr>
<tr>
<td>11</td>
<td>TeamViewer</td>
<td>16%</td>
</tr>
<tr>
<td>12</td>
<td>Adobe Shockwave Player</td>
<td>14%</td>
</tr>
<tr>
<td>13</td>
<td>Cyberlink PowerDVD</td>
<td>10%</td>
</tr>
<tr>
<td>14</td>
<td>Steam</td>
<td>10%</td>
</tr>
<tr>
<td>15</td>
<td>Opera</td>
<td>9%</td>
</tr>
<tr>
<td>16</td>
<td>Cyberlink PowerDirector</td>
<td>9%</td>
</tr>
<tr>
<td>17</td>
<td>Cyberlink YouCam</td>
<td>9%</td>
</tr>
<tr>
<td>18</td>
<td>QuickTime</td>
<td>8%</td>
</tr>
<tr>
<td>19</td>
<td>Google Earth</td>
<td>8%</td>
</tr>
<tr>
<td>20</td>
<td>Cyberlink Power2Go</td>
<td>7%</td>
</tr>
</tbody>
</table>
B Out-of-date Programs

48% of Programs are Out-of-Date!

Looking at the most popular and most critical applications in terms of security, like browsers, Skype, Adobe Reader, and Flash, nearly half of all program instances were not up-to-date.

Using outdated versions of applications not only means missing out on the latest features, compatibility and bug fixes, but it also leaves the door wide open for hackers to exploit vulnerabilities. A combination of lack of awareness and non-user friendly update mechanisms, cause many users to not update their programs regularly.

For this study, Avast sampled data using the software update scan feature, which is built into our free Avast AntiVirus.

Avast Premier and Avast Ultimate include the fully functional Automatic Software Updater, which scans and silently installs program updates. PCs that use Avast updater showed a significant lower rate, as only 10% of programs were out of date, which is caused by either some updates not working, being delayed or our updater deliberately not automatically updating Java 6 and 7 in order to not break compatibility with some applications.
Out-of-date Programs

The Top 10 Most Out-of-Date Programs

1. **Java (Runtime 6, 7 & 8):** Almost 60% of all users (see above) have Java installed, a software that still powers some websites and programs. Unfortunately, 17% of the global PC users still runs versions 6 and 7, which should be uninstalled and replaced with Java 8, as they are outdated and only needed in very specific cases. The rest runs Java 8, which may sound good, if 65% weren’t using an older build. Java should display an update prompting to users Update, but unfortunately it seems this either isn’t happening or users are choosing not to update. All Java users should regularly update their software by visiting the official Java site, and to ensure all their programs are routinely updated, they may use Avast Premier or AVG PC TuneUp, which include an Automatic Software Updater feature.

2. **Adobe Air:** Adobe Air is a programming framework that allows developers to easily code apps for multiple platforms, such as Windows, Mac, Android, and even TV operating systems. However, Adobe Air is not being updated with 90% of users running an outdated version. The latest release may be found [here](#).

3. **Adobe Shockwave:** A popular free web player that powers some games, desktop apps, and websites. Like Adobe Air, Shockwave is also outdated in close to 90% of cases. Unintentional vulnerabilities are frequently discovered in software programs, which is why running outdated versions of Shockwave, and other software, place users at risk.

4. **VLC Media Player:** The popular media player, VLC, plays most types of video files. By keeping this program up-to-date, users get more features and receive the latest program fixes. Despite these benefits, 85% of users are running older versions or have automatic updates disabled.

5. **iTunes:** As a top media player, and the only way to sync iPod, iPad, or iPhone devices, iTunes has since lost in popularity. This decrease could explain why 75% of all iTunes installations are outdated. An outdated version of iTunes is nothing that should be taken lightly, given that code flaws are inevitable in all software and could be used to attack users with old versions.
Firefox: 71% of the Firefox users are not running the latest version of the browser, despite its automatic update feature. To ensure users are running the most current version, the automatic update feature should be turned on within the browser’s settings.

7-ZIP: Down from the 82% of users who had an outdated version at the end of last year, only 56% of users have an outdated version of the other popular file archiver and decompression tool 7-ZIP. While not as prevalent as before, it’s still high enough to make it into our top 10 and could be fixed with a simple update to the latest release.

WinRAR: Popular (de)compression tool, WinRAR, handles most archive formats, such as ZIP, RAR, CAB, and more. While the program still looks nearly identical to how it did years ago, like most program updates, newer versions typically include error fixes, security patches, and support for additional compression methods. Since the program does not automatically update, it is not surprising that 55% of all WinRAR software is outdated.

QuickTime: The well-known media player QuickTime usually comes installed with iTunes. While its usage base isn’t high (roughly 10 million out of 155 million total among the sampled user base), more than half, or 53% are running an older version.

Adobe Flash Player: Rounding out the list of top ten most outdated software is Adobe Flash Player, which is used to support web technologies. Given that Adobe Flash Player support is officially ending in 2020, and due to its constant negative effects on security and performance, users should ensure they are running the latest version, if they are still using the program.

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Users should manually check for updates or use an automated software updater. PC users should consider Avast Premier to ensure they are running the latest versions of programs installed on their computer.
Global Windows Usage

Microsoft’s Windows 7 is still used by **45%**.

Despite losing a small percentage of users, Windows 7 is still the most used operating system with 45% of users running the OS.

In comparison, Windows 10 usage went up by 5% and is now being used by 35% users. Windows Vista and 8 and 8.1 make up the smallest part at 2% each, while Windows XP still has a share of almost 5% (see below).

Users of both Windows 7 and 10 are still on the safe side: both operating systems are fully supported from a security perspective. The only issue Windows 7 users might be facing is support for newer hardware. For example, the aging OS already isn’t officially supporting new processor generations like Intel’s Kaby Lake, so users and businesses will be eventually forced to migrate to Windows 10 when upgrading their desktop PCs.

More concerning, however, are the more than 4.6% who are still running the completely unsupported Windows XP. Microsoft stopped security updates and ended support for Windows XP in 2014, making it extremely risky to use as software vulnerabilities are not being patched and delivered to users. According to our data, the highest shares of Windows XP users can be found in the Ukraine with 11% of all Windows users still running the outdated and unsupported OS, closely followed by Venezuela at 8.5%. Next in line are Poland and Russia with 7.33% of users running Windows XP each, suggesting that users or businesses are willing or capable of using newer versions of Windows. Countries with the least XP installations are Brazil and Mexico (2.5% each) as well as Germany and UK with 2.8% each, meaning that they’ve invested in new hardware or an OS upgrade more than the average worldwide.

PC Insights & Analysis - Software
Avast PC Trends Report Q3 2017
C Typical Age & Manufacturers of PC
The Average PC is over 5 Years Old

Users are happy with their devices and don’t see the need for an upgrade with the average PC being more than 5 years old.

Only 10% of PCs and laptops worldwide were purchased in 2015 or later. Surprisingly, nearly 28% of PCs are more than eight years old, meaning they are from the Core 2 Duo era and thus painfully slow when doing anything more elaborate than editing a word file or browsing the web with more than one or two tabs. Some of these PCs are likely ready to break anytime soon. The median age of all measured PCs from 155 million users comes in at slightly more than 5 years. This data is in line with other surveys and statistics, such as Statista’s report*, which dates the average PC age at 5½ years.

Looking at regional differences, it seems that users and businesses from the US seem to replace PCs more often as only 14% operate desktops and laptops older than 2009, which is lower than the global average of 28 percent. Also, only 15% of US users own PCs newer than 2015.

Roughly the same percentage applies to France, Germany, and UK with usually 13-15% owning 2009 or older computers and up to a share of 16% (UK) for new PCs. In Russia, on the other hand, old PCs make up for 18% of all PCs, while only 5% of the PC users in Russia own a computer made in the last 3 years.

Users are happy with their devices and don’t see the need for an upgrade with the average PC being more than 5 years old.

HP leads the Desktop PC Market

The data indicates that one out of five users own and operate an HP laptop or desktop PC (19.81%). The other four out of five use Acer, Asus, Dell, and Lenovo, with roughly 10% market share each.

Interesting fact: 0.12% (130,000) of the sampled user base operates Apple Macs and MacBooks to run Windows and use Avast products to protect them.

PC Insights & Analysis - Hardware
Avast PC Trends Report Q3 2017
Memory Size & CPU Cores

The Fantastic 4

The more main memory (RAM) a user has, the more applications or browser tabs can be open without slowing down computer performance.

The standard is 4 GB with 51% of 155 million users having these modules built-into their PCs. That’s also enough for most users who just want to browse, work with Microsoft Office or do some light gaming. More RAM is needed when running more demanding applications like modern games or multimedia applications, which are used by a smaller percentage of users with 15% having 8 GB and roughly 4% having 12 GB or more. Surprisingly, 2 GB sizes are still relatively widespread, with 25% of users worldwide likely suffering from slight lags when running light applications.

Dual Cores are King,
Quad Cores Next in Line

As indicated above, people seem to be keeping their PCs for years. It therefore comes as no surprise that 75% of all the computers in our sample have a dual-core CPU (down only 2% from late 2016). Quad-core chips have increased from late 2016 to mid 2017 by 4% and are now being used by 19% of users. About 6% still run ancient machines with just one core. Far fewer users (0.75%) have 6, 8 or more CPU cores. While that’s 0.25% up from our last report, it’s still nowhere near to what could be considered popular.
**Hard Disk Type & Capacity**

86% of disks are still mechanical

While slowly gaining in share, Solid State Disks (SSDs) are nowhere near as widespread as their mechanical counterparts.

Even in 2017, SSD sales make up just one-third of all hard disk shipments at an estimated 190 million units shipped, compared to the roughly 395 million mechanical hard disks sold*. This reality is underscored by the user data: Only 7.5% own an SSD while 6.72% have a combination of an SSD and HDD, where the faster disk serves as a system drive and a mechanical disk as storage. 86% of users’ PCs are still powered by the much slower HDD, which uses mechanical platters and a read/write head to get and store data.

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**500GB for HDDs and 256GB for SSDs**

As SSDs are coming down in prices, higher capacity SSDs are becoming more common. While 128 and 256 GB are the most popular sizes (with roughly 28% each), they’re closely followed by 500 GB (25%), which in mid-2017 starts at around $150. Going to the much cheaper HDD; 500 GB is the standard with 42% (42 million) of our mechanical hard disk users having that much space to store their photos, documents, programs and more. Finally, 25% have a terabyte of space.

128 GB 30.0%

256 GB 31.9%

512 GB 24%

640 GB 2.4%

64 GB or less 6.8%

**HDD CAPACITY**

- 1 TB 25.6%
- 250 GB 4.3%
- 320 GB 12.9%
- 160 GB 2.4%
- 750 GB 5.7%
- 2 TB 2.1%

**SSD CAPACITY**

- 1 TB 8.8%
C Methodology

In Detail

This report includes information such as the average age of PCs, the numbers for average amount of programs users have installed, the most popular programs out there, global Windows usage, percentage of outdated programs, PC age, and much more.

The core data is collected from our Automatic Software Updater feature which is built into Avast security software and consists of datasets from a total of 155 million users.

Using a combination of real-world data and global statistics from Gartner*, this report is able to paint a picture of the state of the PC in 2017.

Gartner’s, Forecast: PCs, Ultramobiles and Mobile Phones, Worldwide, 2015-2021, 3Q17 Update, Published 25th September 2017.