

An abstract graphic featuring overlapping organic shapes in shades of teal and grey. The shapes contain various patterns such as fine lines, dots, and diagonal hatching. The overall composition is layered and textured.

2017

UI Design Report



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Introduction

The [2016 Design Trend Report](#) which announced the dramatic shift from Photoshop to Sketch turned out to be quite popular. The website, which won [Awwwards - Site of the Day](#), was seen by 140,000 people only in 2017 and 19,000 folks have downloaded our PDF report.

Encouraged and extremely grateful to the design community, we're putting before your eyes the 2017 Design Trend Report. Just like the years before, this study is mapping out consistent, changing and emerging trends that can be observed during the very final part of the design process - the design hand-off.

Our hypothesis for the 2017 year ("modular, lightweight, and highly iterative design is key to a functional design process") turned out to be quite correct. Design size still keeps dropping, design tools are getting smarter, and due to the rising speed of versioning, designers are cutting out unnecessary objects.

Where do the data come from?

Between 1st of January 2017 and 31st of December 2017 designers from 164 countries uploaded 2,024,815 (almost twice as much as the year before) of Adobe Photoshop and Sketch designs to Avocode. This amount of data provided us an in-depth look at how design size, versioning, layer count, layer effects and other significant factors have changed throughout the years.



Designers are adopting development practices

Interconnectivity

Remember the time when developers used only HTML tags for styling websites? Or perhaps the time when they used in-line CSS styling inside the HTML document? Luckily, those times are far gone, and most developers either link CSS style sheets from the HTML document or if they code in React (or other view frameworks), they use even more granular structure. In other words, developers have adopted UI-kits (styled HTML components) for easier and even faster development. Lately, designers have started to adopt these practices as well.

First, artboards have replaced designing on one rigid canvas. Then you may remember linked smart objects in Photoshop PSB files. But it was the introduction of Sketch Symbols that changed the game. The idea

Designs are getting more interconnected and granular. Only in 2017, Sketch **files got 32% smaller** while there were **25% more artboards** per design on average. Also, the use of **Symbols grew by 25%**, so now every second artboard on average contains a Symbol.

that you don't need to store everything duplicated in each state of the design comes, of course, from web development. The trend of accepting practices and workflows from developers is evident also in other departments.

Responsivity

While developers came up with flexbox

to make responsivity development easier, designers are now invited to use Smart Guides in Sketch or the Repeat Grid and responsive layouts in Adobe XD.

Dependencies

You might have heard about [NPM](#) software registry, right? Well, at the end of 2017, Sketch listed [426 Plugins](#) and Adobe introduced [Add-ons marketplace](#) for Photoshop and other creative tools. Adobe XD has also introduced integrations with third party tools.

Version control

You surely know about [GitLab](#), especially if you're building one product with multiple people. Since designers too need to know which version is "final", [Folio](#), [Abstract](#), [Kactus](#), and [Plant](#) have launched a self-standing design version control tools to address this issue.

Systems

Just like [pre-coded UI kits](#) or libraries of ready-made code components, designers

are all about [Design Systems](#). There are already some public solutions, but we expect this trend to unfold in 2018 really.

"I honestly believe that the closer you bring designers and developers together, the faster you can progress in your projects."

-Vu Hoang Anh (CEO @Avocode)



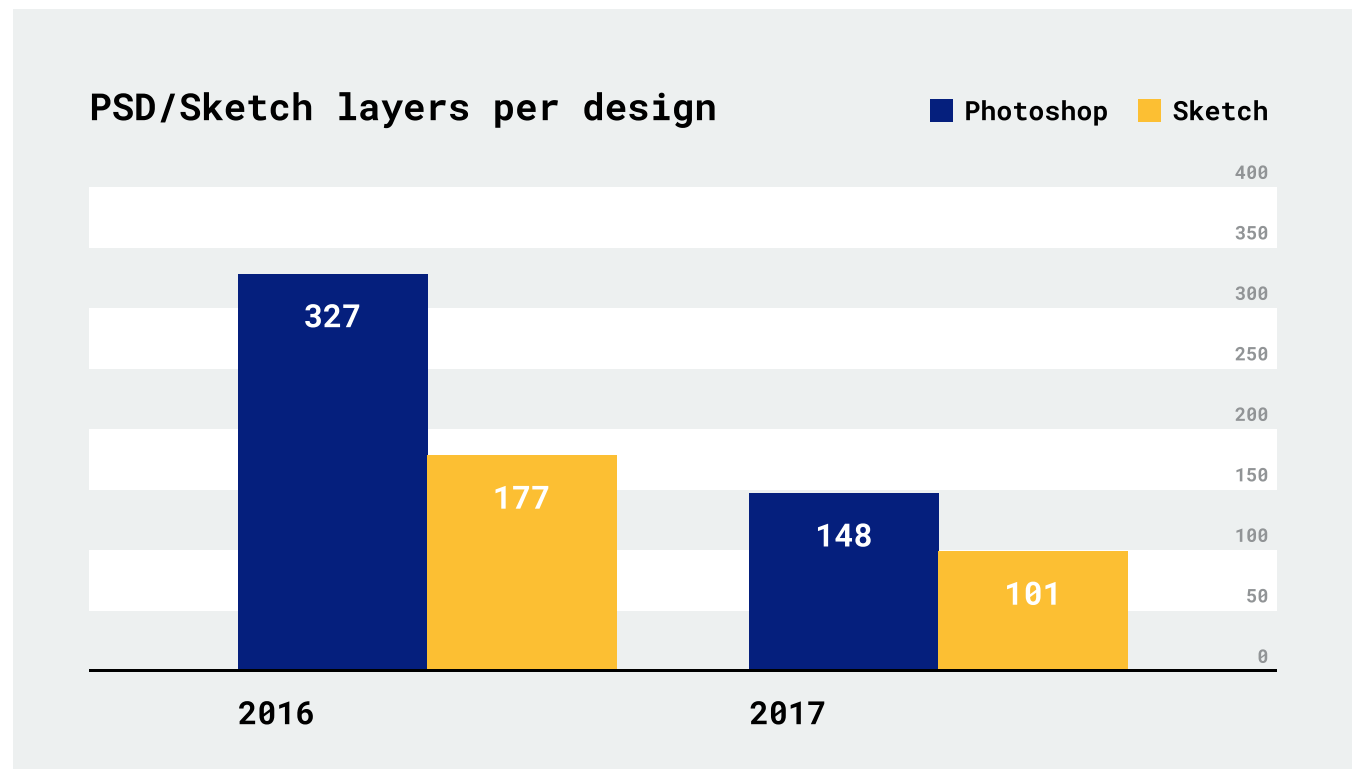
Designers are cutting out unnecessary parts

Surprisingly this trend is not strictly speaking aesthetic, but practical. The puristic and minimal design, which was at its peak around 2015, is still popular. While companies like Dropbox, Intercom, Typeform have recently start to play with more abstract illustrations, popping colors and add more illustrations, asymmetry, patchwork, the design file layer structure is actually still getting more simple.

In fact, average layer count has dropped by **46% for per Adobe Photoshop** design and by **32% per Sketch** design. Also, the number of layer effects per design dropped by **13% (Photoshop)** and **28% (Sketch)**.

Evidently, it's not about adding more whitespace but focusing more on shipping fast. From what we have observed, designs that have smaller layer count are

iterated more often (i.e., have more design versions). Apparently, designers still pay more attention to what's important to the user than to fancy decorations.



Design file size matters. And it's going down

Shift in the design toolset

It's not that big of a surprise that the decrease of layers has a direct impact on design file size. What's more interesting, however, is the giant difference of design file size when it comes to design format. Unlike Photoshop, Sketch is a vector based design tool and therefore can keep your files much smaller. Raster file formats (like PSD) store data related to each layer (even vector shapes) as bitmaps and therefore need to keep data for each pixel, whereas vector-based formats (like Sketch) store most of the data as a geometric description and maintain the information related to pixels only for bitmap layers.

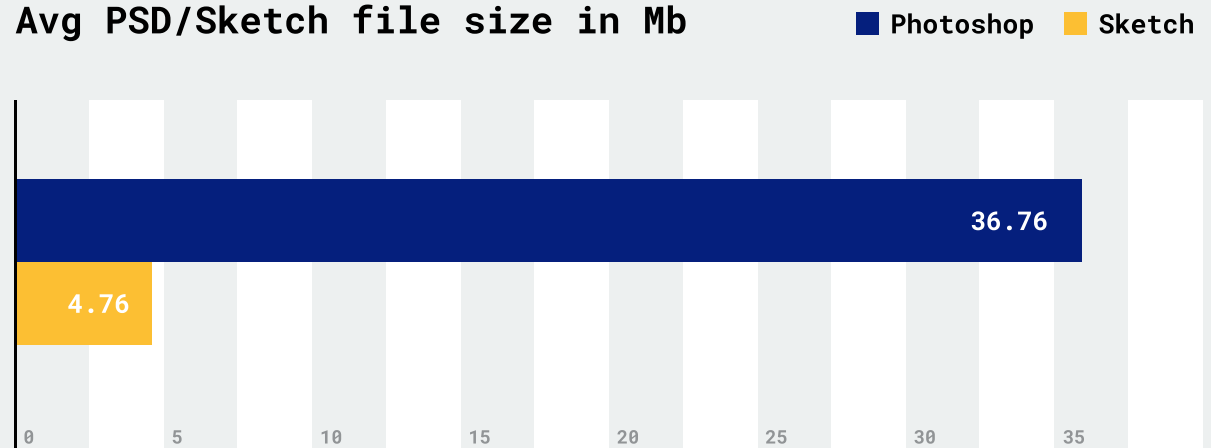
According to UX tools 2017 survey, the 5 most popular interface design tools on the market are Sketch, Photoshop, Adobe Illustrator, Adobe XD, and Figma (in that

order). We too have seen a prevalent growth of Sketch app usage (2017: 62% Sketch designs vs. 38% Photoshop designs).

We could argue, that lightweight and small file output of tools like Sketch, XD, or Figma is an important factor in their adoption by designers.

Sketch files are up to **7.7x smaller** than Photoshop files. Plus average Photoshop file contains **27 bitmap layers**, while an average Sketch file **only 10**.

Avg PSD/Sketch file size in Mb



Last year when we spotted the growing use of Sketch, we decided to encourage this trend by building the first ever [Photoshop to Sketch Design Converter](#).

The average input Photoshop design was **36.76MB** large and the Sketch output **4.76MB** large. We realized that our service could not only save designers hours on recreating designs, but we can also save them **32MB** per design files.

The demand for transferring from Photoshop to Sketch is indeed huge. Just in 5 months, since we released the converter beta version, we converted 52,236 PSD files (for companies like Tesla, Atlassian or Microsoft - see other reactions on the next page).

Since Adobe XD has introduced a free plan in May 2018, we expect to see a

decline of Photoshop users (especially those who were using the tool only for screen design) and rapid growth of XD user adoption. Since Adobe XD is now the first stable screen design tool that offers a free plan as well as macOS & Windows desktop app, we will definitely see a decline in Sketch app user adoption growth if not a decrease of the current Sketch user base.

Shift in image export

With the higher awareness of file size, both designers and developers appreciate lightweight image assets that scale easily and are prepared for high-resolution screens. In fact, the web loading time matters now more than ever. For example, [Behance 2018 Design Trend Research](#) found out that: "An estimated 47% of users browsing the internet expect a website to load within 2 seconds or less." Additionally, this [article by Watb](#) says that: "PNGs increase in HTTP requests and thus a slow down the site. SVGs are not only smaller in filesize, but the XML

can be embedded inline to your HTML, eliminating HTTP requests and speeding up your site."

While PNG is still the most exported image asset format (66.84% of all assets exported from Avocode in 2017), SVG's have replaced JPEG as the second most exported format with 19.18% of all assets exported from Avocode in 2017.

Additionally, 98% of Avocode users use [automatic image optimization](#) of PNG, JPEG, and SVG images. For example the [open-source PNG image optimization](#) we're using has saved up to 60% of file size per each exported asset, and the SVG image optimization has saved up to 80% of file size per each exported asset.

Avocode PSD to Sketch Design Converter saves 32MB per file on average



"It is so easy and serves a very important purpose."

Aeron Ridgeway

Best Buy



"As UI designers we were using Photoshop but gradually switched to Sketch. The converter helped us a lot during the switch."

Xiu Xuan Xie

Alibaba Cloud



"I am pretty happy with the result of the testing file I ran yesterday. I will definitely recommend to our team to start using this service."

Wenny Lo

Salesforce



"I needed to do a quick conversion, and with your tool, I found what I was looking for, I was pleasantly surprised. So amazing!"

Yolanda Rubio Fernandez

Zara

Copywriters, we got good news!

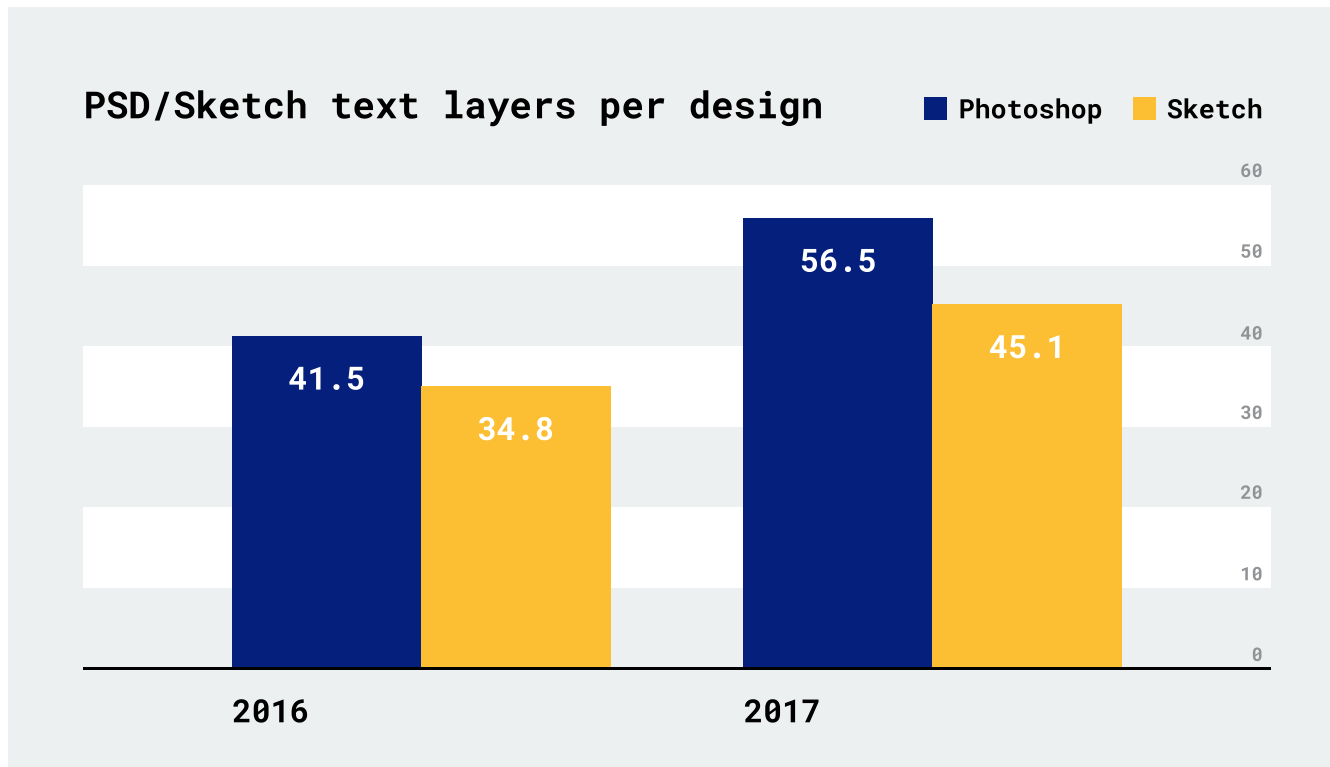
It seems that 2017 was full of stories. While the total layer count decreased, text layers were actually going up (probably at the expense of bitmaps and shapes). For many years text has been pushed away, especially because of the

short attention span of web users.

The growth of text layers (see the chart below) signifies that designers got more confident that people are willing to read again. Unfortunately, we are unable

to count the number of characters to determine if sentences and text blocks are getting indeed longer, but judging from the rise of text layer count, we deduce that design in 2017 has gotten surely more explanatory than it used to be.

But in 2017 the amount of PSD text layer per design **grew by 25%**, and the amount of Sketch text layer per design **grew by 10%**.



Typography as a trend is also one thing we definitely should not leave out. While every word still needs to be carefully selected to fit into your design story, some text characters have become design symbols on their own.



Report Summary

After going through tons of data from 2,024,815 designs, we're excited to say that designers and developers are coming closer together. However, we believe both parties still have a lot to learn from each other.

The two most significant continuous trends were:

1. The sophistication of smart design tools

Design tools respond to developer's impact on designers, represented with version control and design systems in 2017. We expect that design tools will keep getting smarter - for example, in 2018 hope to see an option to mark design object (layer group or a Symbol) semantics such as button or inputs.

2. The apparent appeal of lightweight files

Sketch has dominated the screen design market by providing a lightweight vector-based format. We have seen that converting from PSD to Sketch can save up to 8× the file size. We expect that Figma and Adobe XD will steal some of Sketch and Photoshop users in 2018, especially because they are not only lightweight and vector-based but also cross-platform.

We've also mapped out two most significant short-term shifts in design trends:

1. The lack of unimportant elements in designs

We were excited to welcome this trends. Getting rid of unimportant layers and layer effects help designers focus more on functionality and UX which is something we all benefit from.

2. Highly scalable and lightweight image assets

Image formats and image optimization play a key part in today's design which needs to be both incredibly scalable but also load fast without discriminating users with slower internet connection. With the rise of interactive design we expect more and more design parts being represented in code and less and less in bitmaps in 2018.

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This study was conducted by **Avocode**

Avocode is a fully-featured tool for your design-to-code workflow. 10,000+ designers and developers are using it to directly import, share and inspect Sketch, Adobe XD, Photoshop, & Figma designs on any OS to build web and mobile apps faster. Avocode stands out among its competitors thanks to its robust Monroe rendering engine that gives users real access to design layers.

[Avocode](#) is backed by 500 Startups, Kima Ventures, Teec Angel, Wisemont Capital, and Jeremy Yap. It is headquartered in Prague, Czech Republic.

Feel free to ask us anything at team@avocode.com

Hand-off designs to developers without preparing assets

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The screenshot displays the Avocode interface for a design hand-off. The top navigation bar shows the project name 'foodway.psd' and the 'INSPECT' mode. The central area features a mobile app design for 'Señor Sisig's California Burrito', showing a restaurant interior and a menu item with a rating of 8.9, 244 check-ins, and a price range of \$\$\$\$.

On the left, a 'LAYERS' panel lists various design elements such as 'Modal', 'Layer 1', 'Shape', 'Text layer 2', 'Symbol', 'Background', and 'Inactive'. The 'Text layer 2' is currently selected.

On the right, a 'SHAPE' panel provides details for a selected element, including its size (60px H: 60px) and position (X: 420px H: 640px). Below this, a 'STYLES' panel lists CSS-like properties for the shape, such as 'position: absolute;', 'left: 340px;', 'top: 180px;', and 'width: 730px;'. There are also buttons for 'EXPORT 'SHAPE'', 'COPY ALL', and 'VARIABLES'.