How to start up, sell more, and reinforce your brand through product photography.
People who search and shop on their smartphones at least once a week say that product images are the shopping feature they turn to most.

Jonathan Alferness,
Vice President, Product Management,
Google Shopping Inside AdWords,
May 2016
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Pixelz
524 Union Street #266
San Francisco, CA 94133
United States
ca@pixelz.com
www.pixelz.com

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Whether you are a big box brand or a scaling SMB, if you are an ecommerce retailer, you are in the business of production.

Your success often boils down to the efficiency of your workflow — how fast can you:

- source products
- produce imagery
- create website content
- sell

Organization is important for any type of workflow — especially when it comes to preparing your merchandise photos for your online store. Detailed preparation, a customized workspace, simple processes, archiving and transferring systems, and communication are all necessary components for streamlining your photo production workflow and achieving maximum productivity.

To help you evolve your post-production ecommerce photography process to the industry’s best practices, we’ve gathered everything you need to know to streamline your methods.

1. Organization

Catalog Your Products

Organization is the first key to maximizing your company’s productivity. In an ideal situation you will have all of your products paired (if applicable), and cataloged by color, description, size, associated tags, product name and any other identifying info.

It is also recommended that you attach a small tag to each product, as shown above. This tag should include basic identifying information you cataloged.

The tag included on this shoe provides clear identifying information about the product.

Many times this info can be found on the packaging from the brand, but you can also create your own unique system. If you sell unique or original products, you will need to create your own.

Make sure that the item number you assign to each product matches a folder on your computer or external hard drive that will provide all identifying information and assure that your products are readily available and identifiable.

This naming and tagging structure will help to upload the correct images to the correct product on your backend — and it will also help to reduce incorrect sending of product (i.e. solve for inventory management issues) as you grow.

The 5 Components of an Efficient Workflow

All product photography workflows boil down to five components:

- Organization
- Preparation
- Test shooting
- Shooting
- Post-production processing

In the following sections, we’ll walk you through each of these steps to help you setup your own detailed plan.
Catalog Your Images
Just as it is important to organize your products, it is equally important to organize the digital photographs and files associated with them.

You can choose to go through your images, sort them into file folders and rename them by hand, or you can leave that to an image cataloging program like Adobe Lightroom.

Cataloging software is useful because it allows you to:

1. see all the images that you have taken
2. filter through them by deleting or selecting images
3. rename files
4. make “batch” edits to multiple images at one time

Some programs are better than others at cataloging imagery, but Adobe Lightroom is generally considered to be one of the most cost-effective. With it, you’ll also be able to rename and locate files, as well as perform some post-production processing.

Backup Your Images
You also want to make sure that you store your images in more than one place.

External hard drives are great for this. Look into finding an external hard drive that is compatible with your current computer and software, of course, but it would also benefit you to look for one that is compatible with both PCs and Macs so that when you start sharing files with others, you don’t run into conversion issues.

Another great option is virtual cloud storage.

A few cloud storage solutions include:

1. Dropbox
2. Google Drive
3. Box
4. Bitcas
5. Apple’s Cloud Storage

In most cases, if the files are valuable to you, you should store them on both an external hard drive and in cloud storage. Some image management programs, like Apple’s Photos app, may automatically backup your images in the cloud.

External hard drive prices have plummeted, with 1TB+ drives available for less than $99 (depending on brand and storage) even in name brands like LaCie.

This is the export screen in Adobe Lightroom where you’re presented with a number of different settings to customize the export.

Setting up a naming convention early on will help to decrease product management errors on your ecommerce backend.

Ideally, by the end of your cataloging process, you’ll have the product name, description and date included in the name of the file folder where you store your images and perhaps even in the individual filenames themselves — and then you’ll create backups.
Create a Workflow Manual
Perhaps more important than any of the organizational strategies we have discussed thus far is creating a customized workflow guide or manual for your company. This manual should include every detail of your photo production workflow methods.

As your company either grows in size or you begin to outsource work to other companies, you will need structured guidelines for how the work should be done in order to maintain consistency.

You will need to update your manual as often as you update your processes. Communication is key in the production business. Never leave anyone out of the loop because, without one functioning part, you will lose momentum in the larger scheme of your production workflow.

2. Preparation

Prepare Your Products
After you have organized your products and work area, you should prepare your products to be photographed.

Be prepared to spend adequate time prepping each item — even the smallest speck of dust will be visible in a product image.

While you will be able to fix mistakes in post-production processing, advanced editing is time consuming and requires a high level of proficiency with cloning and healing tools, so it is better to fix as much as you can manually before the ecommerce photography shoot.

For example, clothes should be:
- clean
- free of large tags
- Steamed
- examined for defects

You should follow a similar inspection and preparation process for other types of products as well.

- Shoes should be wiped and shined.
- Jeans should be pressed.
- The tiniest missing jewel on a necklace should be replaced.

Organize Your Products
After you have ensured that your products look their best, line all of your products up in the order that you plan to photograph them, along with their identifying information.

Picture a grocery store shelf, but with products out of their packages, clean and ready to shoot.

If you have cataloged your products correctly, then you should be able to compile an ordered list and simply mark them off as you progress through the photoshoot.

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Product #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Kor's Watch - Rose Gold/Brown - Large Face</td>
<td>1</td>
</tr>
<tr>
<td>Michael Kor's Watch - Rose Gold/White - Large Face</td>
<td>2</td>
</tr>
<tr>
<td>Michael Kor's Watch - Rose Gold/Brown - Small Face</td>
<td>3</td>
</tr>
<tr>
<td>Michael Kor's Watch - Rose Gold/White - Small Face</td>
<td>4</td>
</tr>
<tr>
<td>Michael Kor's Watch - Ceramic White - Large Face</td>
<td>5</td>
</tr>
<tr>
<td>Michael Kor's Watch - Ceramic White - Small Face</td>
<td>6</td>
</tr>
<tr>
<td>Michael Kor's Watch - Matte Black - Large Face</td>
<td>7</td>
</tr>
<tr>
<td>Michael Kor's Watch - Matte Black - Small Face</td>
<td>8</td>
</tr>
<tr>
<td>Michael Kor's Watch - Tortoise - Large Face</td>
<td>9</td>
</tr>
<tr>
<td>Michael Kor's Watch - Tortoise - Small Face</td>
<td>10</td>
</tr>
<tr>
<td>Michael Kor's Watch - Silver/Silver - Large Face</td>
<td>11</td>
</tr>
<tr>
<td>Michael Kor's Watch - Gold/Gold - Large Face</td>
<td>12</td>
</tr>
</tbody>
</table>

Our products will be photographed in this exact order and they are all arranged accordingly in our studio.
Select a Model
If you will be photographing your product on a live model as opposed to the ghost mannequin method, make sure that the model matches the “look” and style of your product.

Choose a Camera and Lens
For basic product photography, we recommend the Canon PowerShot SX510 for $160 or the Nikon D53000, starting at $599.

Generally speaking, the more you pay for a lens, the better quality glass and internal structure the lens contains.

High-end glass is what will really make a difference in the quality of your images, not so much your camera.

With that in mind, most professional photographers would recommend that you skip buying lower end “kit” lenses and third party lenses and instead purchase professional-grade lenses from the manufacturer that produced your camera.

Beyond quality, your lens(es) of choice should depend on the types of products that you need to photograph and the level of consistency that you want to establish between your catalog images.

There are two major types of lenses:

- **Zoom lenses (e.g. 24-105mm)** that allow the user to choose between a range of focal lengths. Zoom lenses tend to sacrifice some sharpness for flexibility and prime lenses sacrifice flexibility for sharpness.
- **Prime lenses (e.g. 85mm)** that provide only one focal length.

If you work with live models or a wide variety of products, a flexible zoom lens might be the most efficient choice for you.

However, if you only photograph ceramic bowls and you need every photograph to look exactly the same except for the pieces themselves, a prime lens can offer quality that a zoom lens can’t.

For zoom lenses, choose a focal range that contains all of the focal lengths that you commonly use to photograph products. Some product photographers will only need a 24-70mm lens, while others may get more benefit from a 24-105mm or 24-120mm lens.

What type of lens should I use?

- **Use Prime If:**
  - Products are similar size
  - Studio is permanent
  - Extra sharp

- **Use Zoom If:**
  - Products are different size
  - Shoot in different places
  - Don’t want to buy multiple lenses

If you’re going to be consistently shooting similar products in one location, a prime lens is probably worth it — and not all prime lenses are expensive. The Canon “Nifty Fifty” EF 50mm f/1.8 is extremely popular and great value at the low price of $110.

If you’re going to be moving around shooting different products in different places, and you don’t want to buy several prime lenses, go for a zoom. They may not be quite as sharp, but you can still capture high quality images with proper care.

Select Image Capturing Software
Spend a little time researching programs to capture your imagery. You may find it easy to simply shoot in-camera with your CF or SD card and then transfer the images over to your computer via card reader at a later time.
However, image capturing software can help you shorten this process while providing additional benefits.

These programs will allow you to shoot with your camera “tethered” to your computer and will automatically upload any images that you capture into a designated folder. You can read this blog post for in-depth instructions on how to tether with Adobe Lightroom for product photography.

Tethering will eliminate unnecessary transferring steps, give you a live preview, and jumpstart your post-production process.

Simply pressing your computer’s spacebar will fire your camera and allow for immediate image review. You can monitor and adjust exposure and other camera settings right from your computer because the program communicates directly with your camera.

Adobe Lightroom is a great program at an affordable price, and is probably the best entry point for new product photographers (especially since it’s bundled with Photoshop for $10/mo).

The next step up from Adobe Lightroom is Phase One’s Capture One Pro. If you’ve ever been in a professional photography studio, odds are you’ve seen Capture One at work.

The tools are similar in many ways, but where Lightroom tries to be many things for many different types and levels of photographers, Capture One is designed for studio professionals. It’s faster, more customizable, has more functions designed for collaboration with clients, and claims superior image quality.

Capture One is available as a monthly subscription for $15/mo, or can be purchased for $299. It’s worth noting that a limited version, Capture One Express, is free for many supported Sony cameras like the mirrorless a7-series.

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**Image Capturing Software Side-by-Side Comparison**

<table>
<thead>
<tr>
<th></th>
<th>Adobe Lightroom</th>
<th>Capture One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tethering</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Post-production tools</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Purchase option</td>
<td>(not subscription)</td>
<td>✔</td>
</tr>
<tr>
<td>Bundled with Adobe Photoshop</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Price</td>
<td>$10/mo (min 12 months)</td>
<td>$15/mo or $299 lifetime</td>
</tr>
</tbody>
</table>

Select Post-Production Processing Software: Adobe’s Suite of Tools

If your image capturing software does not include advanced post-production processing capabilities, you will need to purchase a program like Adobe Photoshop that will allow you to make these types of edits.

Photoshop is the most well known and powerful image editing program, and it works in perfect tandem with Adobe Lightroom. Adobe has shifted to a subscription model in recent years, so you’ll need to pay monthly for Photoshop unless you want to buy an outdated version; the Adobe Creative Cloud Photography plan combines Photoshop and Lightroom for $9.99/mo.

Customize Your Studio Workspace

For e-commerce products, photos should look clean, simple and consistent. The best way to do this is to build a tried-and-true studio setup and customize it to fit your own needs.
You can learn how to set up a simple do-it-yourself studio space like the one in the image above by following our detailed step-by-step walkthrough.

To get you started, you will need the following items to build the above photo studio:

1. White seamless paper roll
2. Your product
3. Camera and tripod
4. Foam board for fill light
5. Gaffer’s tape
6. Window light

Accident-Proof Your Studio Workspace
After you have chosen and built your studio workspace, it is a good idea to take steps to prevent accidents.

For example, carefully position your computer, product, chair and lights in areas where you won’t make the work more difficult or trip yourself up.

If you are working with artificial lights, remember that they use a decent amount of power and are expensive to replace.

There is no need to give yourself the opportunity to trip over cords or knock things over and risk having to pay for it twice because you broke equipment and injured yourself.

Here are a few affordable friends:

- Gaffer’s tape
- Velcro
- Zip ties
- Sandbags
- Clamps

Coil cords near light sources and tape them down to reduce the risk of tripping. Use a heavy duty multi-outlet and extension cords when you can.

If you can think of anything to make your work space safer, do it!

3. Test Shooting

Document Studio Measurements
After you have selected your equipment and have built a customized studio workspace, it’s time to set up your first product. Once you have it in place, take a test shot to perfect your camera settings and composition.

When you have captured an acceptable image of the product, measure, mark and document everything.

Instead of allowing cords to run wild throughout your workspace, coil them up neatly and place the coil away from walkways. Also, wrapping the cord once under the leg of the light stand will drag the light, rather than trip you and topple over the whole light.
Measure and mark the distance from the floor to the top of the shooting surface, the distance from your tripod and camera to the product and even the distance between the lowest part of your camera lens and the floor.

This may seem like a waste of time, but it is absolutely necessary if you want to create consistent images for your website.

Even if you leave your studio set up indefinitely, accidents happen, and if you don’t have exact measurements, you may be forced to reshoot if you can’t figure them out again.

**Document Camera Settings**

The same principles apply for camera settings, especially in manual mode. After you perfect them, write them down! And that doesn’t just mean shutter speed and aperture settings — it means:

- Shutter speed
- Aperture
- ISO
- White balance
- Focal length
- Anything else that might vary from shot to shot unless set specifically

You’ll find most of your settings on your camera’s display screen.

For instance, if you are photographing a product on a model, you may shoot the image with a shutter speed of 1/250, an aperture of f/16, an ISO of 200, and a focal length of 50mm.

If you’re using artificial light, you’ll need to make a note of those specifications as well.

Perhaps you’re using a 5200k fluorescent studio light on high power supplemented by natural window light on the product’s left side. Make sure that all of this information is well-documented so that you can re-create the exact same lighting situation from shot to shot, and even from photoshoot to photoshoot in the future.

**Choose Image Quality**

Be aware of the different types of image quality settings that are available with your camera so that you can pick one that suits your needs and use it consistently.

If there is a chance that the images will be used for different types of media and not just on the web, then you may wish to set the image quality to “RAW” so that you get the largest, highest-quality files that your camera can create.

RAW files provide the maximum ability for editing, but RAW files are often large and can only be opened in certain types of editing software.

For the most part, “JPEG Fine” (medium or large) is perfect for images that will only be used on the web. JPEG files are easy to edit, take up less space on memory cards and hard drives, and can be quickly transferred between devices or uploaded to the web because of their smaller file sizes.

**4. Shooting**

When you have thoroughly measured and documented your studio setup and camera settings, it’s time to begin shooting.

One of the most important and helpful things that you can do when photographing your products is to shoot like Photoshop does not exist.

Don’t tell yourself that you or someone else can “fix” mistakes in Photoshop. Learn everything that you can to be able to create images that are as close to your desired final images as possible.

**5. Post-Production Processing**

After you have captured your product images, transferred them to your computer, deleted unwanted images from the catalog, and named and saved the files, you are ready to begin post-production processing to make your images look as professional as possible.

This is the simplest and most beneficial step to outsource, since digital assets are easily transferrable and the time and cost savings are significant. Pixelz, for example, offers easily integrated post-production processing with a 24 hour or less turnaround time.

Tools like custom order specifications and a quality inspector allow you to get high quality professionally edited product images cheaply, quickly and easily.
However, if you are on a budget that does not allow for outsourcing, you should implement the following processes to maximize your productivity. There are several tools and DIY techniques you can take advantage of to streamline your workflow.

**Batch Process with Lightroom**

Don’t waste time repeating the same adjustment on multiple images. Take advantage of professional image editing software, particularly the Adobe Creative Suite.

Color correction, for example, can be done en masse using Adobe Lightroom. Lightroom is intended for photography professionals and pairs perfectly with the better known Adobe Photoshop.

![Lightroom](image1)

![Photoshop](image2)

**Lightroom**

Lightroom is your go-to app for organizing, enhancing, and sharing your images, whether they’re from your iPhone, point and shoot, or DSLR.

**Photoshop**

Photoshop gives you the tools for retouching, compositing, and editing down to the pixel so you can transform your images into anything you can imagine.

**Utilize Photoshop “Actions”**

The most well known and accessible image editing software program is Adobe Photoshop. In Photoshop, there is a section called Actions.

When you figure out all of the steps to make your images look the way that you want them to look, you can actually “record” the process by which you created the final image into an “Action” and apply that action to future images to automatically make the same edits with the press of a button.

**Save Multiple Versions of Each Image**

Before you begin editing an image, you should save the original image according to your file naming system if you haven’t already. Next, you should make your edits and then save the edited, large version of the image as a separate file. Finally, you will also need to create a smaller web version of the file and save that as a separate file too.
There is a certain way to optimize your images for print or internet use.

Along with cropping, this should be the last thing you do with your images because you want to have all of the information available while you are editing the image, before you start cropping information out.

• Print files should be saved at full size and 300dpi (resolution)
• Smaller web files should be downsized and saved at around 100dpi

You should also label accordingly by including version information in the actual file name. For example, the original files in the image above are CR2 or “RAW” files. The images in the folder titled “Selects” are the images that were chosen for editing from the original CR2 files.

Each image in the folder titled “Finals” has a large, printable version and a smaller web-ready version saved there:

• the larger versions are named: ProductName_CompanyName_Color-print.jpg
• the smaller versions are named: ProductName_CompanyName_Color-web.jpg

However you choose to save and name your files, remember to never save over them or all of your hard work may be lost forever.

Final Word
Improving your company’s productivity is a lot of work; that’s why large fast fashion retailers outsource the majority of their labor. If you are doing everything yourself until there is more breathing room in your budget, improving your workflow methods is essential to becoming more efficient.

The average fashion retailer spends two weeks preparing their products to be sold online, and you can achieve that level of productivity, too.

Optimizing your organization, preparation, test shooting, shooting and post-production processing will save you time and money in the short and long term.

Remember, it is all a matter of learning, doing and fine tuning. You will get better with practice. Your team will grow along with your business. The more finely tuned you become, the faster you will rise to the top.

We have included identifying information in our images’ filenames to help us quickly determine each image’s version.

Each image in the folder titled “Finals” has a large, printable version and a smaller web-ready version saved there:
Chapter 2
A Step-by-Step Guide to High Quality Product Images Shot with Your Smartphone

Before you spend money on a DSLR and lenses for your product photography, consider using the quality camera you carry around with you all the time: your smartphone.

You may be thinking that using your smartphone for product photography sounds a bit crazy, but that’s not the case any more. Today’s advanced technology makes it absolutely feasible to create great product images utilizing your smartphone’s advanced camera features and a tripod.

This option is both budget-friendly and user-friendly — not to mention convenient!

Using Your Phone as a Camera

Most smartphones in today’s market come equipped with great cameras. If you’re one of the many consumers who have purchased one of these devices, then you have a high quality DSLR alternative right at your fingertips.

What are the best phones for taking photos? Below are a few smartphones that have great camera features for product photography:

<table>
<thead>
<tr>
<th>Phone</th>
<th>Camera specs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apple iPhone 7</strong></td>
<td>- 12-Megapixel camera</td>
</tr>
<tr>
<td></td>
<td>- f/1.8 aperture (wide angle) or f/2.8 (telephoto)</td>
</tr>
<tr>
<td></td>
<td>- HDR multi-frame image processing</td>
</tr>
<tr>
<td></td>
<td>- Optical image stabilization</td>
</tr>
<tr>
<td></td>
<td>- Quad-LED True Tone flash</td>
</tr>
<tr>
<td></td>
<td>- Local tone mapping and white balance</td>
</tr>
<tr>
<td></td>
<td>- Autofocus</td>
</tr>
<tr>
<td></td>
<td>- Exposure control</td>
</tr>
<tr>
<td><strong>Samsung Galaxy S8</strong></td>
<td>- 12-Megapixel camera</td>
</tr>
<tr>
<td></td>
<td>- f/1.7 aperture</td>
</tr>
<tr>
<td></td>
<td>- HDR multi-frame image processing</td>
</tr>
<tr>
<td></td>
<td>- Autofocus</td>
</tr>
<tr>
<td></td>
<td>- LED flash</td>
</tr>
<tr>
<td></td>
<td>- Pro mode for manual settings (ISO, shutter speed, white balance, exposure)</td>
</tr>
<tr>
<td><strong>Google Pixel &amp; Pixel XL</strong></td>
<td>- 12-Megapixel camera</td>
</tr>
<tr>
<td></td>
<td>- f/2.0 aperture</td>
</tr>
<tr>
<td></td>
<td>- Large 1.55μm pixels</td>
</tr>
<tr>
<td></td>
<td>- HDR multi-frame image processing</td>
</tr>
<tr>
<td></td>
<td>- Extremely short capture time</td>
</tr>
<tr>
<td><strong>LG G6</strong></td>
<td>- 13-Megapixel camera</td>
</tr>
<tr>
<td></td>
<td>- f/1.8 aperture</td>
</tr>
<tr>
<td></td>
<td>- Phase Detection Auto Focus (PDAF)</td>
</tr>
<tr>
<td></td>
<td>- Resolutions: up to 4160 x 3120</td>
</tr>
<tr>
<td></td>
<td>- Manual Mode – adjust shutter speed, ISO, exposure, white balance, and more; save image as RAW (JPEG + DNG)</td>
</tr>
<tr>
<td></td>
<td>- Optical Image Stabilization (OIS 2.0)</td>
</tr>
<tr>
<td></td>
<td>- HDR Options – set HDR mode to on, off, or auto</td>
</tr>
</tbody>
</table>
Recently, The Verge put each of the above phones in a shootout against the others, comparing:

- Color
- Low light
- Dynamic range
- Dual camera functionality

Whichever smartphone you choose to use for the photoshoot, make sure that your device has autofocus and the maximum amount of megapixels possible.

Accessories
With all of the different accessories and gadgets that can be used with smartphones, it can be hard to decipher what you actually need to achieve great images.

We recommend using:
- a backdrop
- a table
- a lighting setup
- a stand or tripod and a lens to help your images stand out

Backdrop
Use a white or light gray backdrop behind your product to give your photographs a clean and consistent look and to eliminate distractions.

You can create your own backdrop easily by using a sheet, rolled paper, foam board or a wall. It is best to make a “sweep” so that your backdrop is not only behind the product, but underneath it as well.

This will greatly speed up your post-production workflow.

Table
Use a table so your product sits higher, which will make it easier for you to photograph your product during the shoot.

Depending upon the type of image stabilization equipment you choose to use, you may prop your smartphone on the table as well.

Light
There are many options for lighting, but the easiest and most budget-friendly option is natural window light.

Set up your product and equipment near a large window to allow for ample light in your frame.

If natural light is difficult for you to find, try using a larger lamp or renting a softbox-type lighting kit, depending on how big your object may be.

Image Stabilization
Using soft natural light makes for beautiful product photos, but it often creates the need for image stabilization equipment, such as a stand or a tripod.

Although smartphone cameras do contain internal image stabilization software, there will still be camera shake if you hand-hold your phone, resulting in blurry images.

For the best possible results, we recommend using a tripod. Here are a couple great options that can be used with almost any smartphone:
Lenses
Believe it or not, you can use external lenses with your smartphone. Having them on hand is a good way to make it through tough lighting and focusing situations.

If you want to zoom in closer to your product and create a macro product image, for example, you’re going to need a macro or telephoto lens, since your smartphone will only be able to focus from a certain distance away from your product.

Be careful while shopping for lenses: the iPhone 7 uses a dual camera setup that won’t work with most lenses designed for older iPhone models.

Here are a few great lenses that can be used on smartphones:

- $20 – Photojojo, iPhone & Android lenses: This is a great inexpensive lens collection. Photojojo allows you to pick and choose which lenses you include in your package, at about $20 per lens, or to simply try them all. The lenses work on iPhones and Android phones to enhance your camera’s perspective.

- $59-$119 – Olloclip, iPhone lenses: Olloclip has a large and varied collection of nice lenses, designed for specific iPhone models. If you’re old-school, try a 4-in-1 model for the iPhone SE / 5, or if you’re more modern try the Core Lens Set for the iPhone 7 / 7 Plus.

- $79-$99 – Moment, iPhone & Android lenses: If you’re willing to spend a bit more, Moment has some of the highest quality engineering available for smartphone lenses.

Choosing The Right Photo Editing Apps
There are a plethora of camera shooting and editing applications for your smartphone, so how do you choose the right one?

One thing to remember is that apps have been designed to help you use your smartphone to its full potential. We recommend that you start by consulting professional app reviews about which apps are the best. Award winners are a great place to start.

Below are a few apps that have received stellar reviews.

Shooting
For shooting, we recommend that you first try to use the default camera app that comes already installed on your smartphone. If you aren’t getting the results you want, then it’s time to try another application. Here are a couple suggestions.

- $2.99 – Android Camera Zoom FX: This Android-specific app has been rated #1 in camera apps for Android phones. If you’re looking for a shooting application with a few more features than the default camera app, then try Camera Zoom FX to help boost your images to the next level.

- $2.99 – iPhone Camera+: Camera+ is an iPhone-specific application that has been rated #1 in camera apps for iPhones. Using this application will allow you to harness your smartphone’s advanced shooting capabilities. The photos included in this tutorial were taken using this app.

Editing

- Free – Adobe Photoshop Express: Adobe Photoshop Express is a free image editing application for both Android and iPhone smartphones. This quick and easy app might be all that you need in your post-production processing workflow.

- Free – Snapseed: Snapseed is developed by Google and works on both iOS and Android devices. It has sophisticated but easy to use tools like healing, brush, curves, and selective filters. It has shot to the top of popularity charts with avid fans among both professional photographers and casual users.
Shooting with your Smartphone

The Preparation Stage

After gathering all of your accessories and applications, it’s time to use your smartphone to capture your images.

For this tutorial, we will be photographing a pair of earrings with:

- an iPhone 5S smartphone
- a Joby Grip Tight mount attached to a Vivitar mini flexible tripod
- Photojojo lenses

We will shoot the images using the Camera+ app, edit the images with Photoshop Express and store and organize the images using Dropbox.

1. Perfect your lighting
First, consider your lighting situation and choose to set up your studio in an area with ample available light.

We have used a large window to let soft natural light into our frame, as well as a small white foam board backdrop to bounce light onto the “dark” side of the earrings, as pictured above.

2. Set up your table and background
After perfecting your lighting, it’s time to set up your table and white backdrop so that you have something to place your product and tripod on.

We are using white seamless rolled paper for our backdrop, since earrings can very easily be displayed in a flattering manner by hanging them from the paper, as depicted below.

3. Stabilize and position your smartphone

Next, mount your smartphone and position it at the proper distance from your product in order to center your product in the frame, as shown above. Because our earrings are small, we have placed our tripod and smartphone roughly one foot away from our product.

By using a Photojojo telephoto lens, we will be able to zoom close enough to capture the earrings at an optimal crop from this distance.

4. Take care of the extra details
Before you begin shooting, make sure that your product is pristinely clean and that all price tags and strings have been removed.

Dust and minor damage can be fixed in post-production processing, but removing as many imperfections as possible before you photograph your product will save you a good deal of time later.
The Capturing Stage

1. Adjust the app settings
Now that your setup and product have been meticulously prepared, you need to properly adjust your camera’s settings to ensure that you receive the best results.

- **Live Exposure**: Live exposure mode will allow you to read your camera’s auto exposure settings as the camera adjusts it. It is good to take note of your exposure settings just in case you need to change them later.
- **AutoSave**: This feature will allow you to specify where images are saved on your smartphone as you capture them. The default is that images will be saved to the “Lightbox” contained within the Camera+ app, but you can change the destination if you would rather the images be sent somewhere else.
- **iCloud Lightbox sync**: You can also sync your iCloud to your Camera+ Lightbox so every image you shoot will automatically be backed up into your iCloud.
- **Quality**: It is very important that you set your image quality to High so your smartphone can help you create the best images possible.
- **Sharing**: If you use Facebook, Twitter, or Flickr, try setting up this service to facilitate easy sharing after you’ve edited your images.

2. Adjust the camera settings
Now that you’ve properly adjusted your application settings, it’s time to work on changing the camera’s manual exposure settings to capture the best light within your frame.

- **Zoom**: Make sure that you have the zoom feature turned “ON” so that the zoom feature is easily accessible if you need it.
- **Grid**: We recommend leaving the Grid function “ON” because it will help you easily align your product in the middle of the frame.

The settings circled with red are the ones we recommend adjusting.
• **Zoom**: Pull the zoom slider at the top of the screen to adjust the frame around your product. Make sure all of the product fits inside the frame and make sure to leave enough room on all sides so you can crop the image if necessary in post-production processing.

• **White Balance**: To properly set the white balance according to the light temperature in your setup, touch the WB button and then touch the white background.

• **Exposure**: Touch the circular Exposure button and then touch your product so that the camera knows to properly expose the product.

• **Focus**: Touch the circular Focus button and then touch your product so that the camera knows to properly focus on the product.

• **Lock**: When you are finished adjusting each of these settings, make sure to tap each one again to lock the settings in place. This will keep the camera from auto-adjusting the settings while you are taking images.

Take a look at your image and see if you think it needs to be brightened or darkened in order to achieve a proper exposure.

If you think the exposure needs tweaking, touch the +/- button below the circular Focus button and pull the slider up or down to change the exposure.

Our exposure needed to be brightened. We began with the screen on the left and used the exposure slider to brighten the image several stops to create the screen on the right.

However, we still didn’t feel like the setting 0 EV really did the earrings justice, so we bumped the exposure up again to +0.7 EV. Now, it looks great!

3. **Capture the image**

Now that all of the settings have been adjusted and you have perfected your exposure, composition, and other elements of your image, it’s time to make a photo by pressing the big round button from the menu.
If you’d like to get even closer, try using your lenses to capture close-up detail shots with a macro lens or use a telephoto to zoom closer to your product from a distance.

Switching lenses and/or zoom lengths will allow you to capture additional angles and create multiple images for your product listings, which will raise the overall appeal of your product.

Since we saved our images into our Lightbox in Camera+, we will need to move the images into our phone’s “Camera Roll” to be able to edit them in Photoshop Express.

To do so, touch the filmstrip at the bottom of the app, select the images you would like to save to your camera roll, and touch either “Save and Remove,” “Save and Keep,” or “Save Without Edits and Keep.”

The Outsourcing Stage

Now that you understand the foundation of smartphone photography, you can build out a workflow for any product type.

For more information on how to shoot specific product categories with a smartphone, here are some good resources:

- How to shoot furniture
- How to shoot apparel
- How to shoot footwear
- How to shoot accessories

After you are finished capturing your images, you can send them off to a professional outsourcing company like Pixelz who can really make your images shine.

The Editing Stage

Now that we have our images saved into our phone’s Camera Roll, we will open up our editing application, Photoshop Express, and choose the images we would like to edit in order to prepare them for the web.

All digital images need a little bit of tweaking to really shine. Here are a few basic adjustments that we recommend making to enhance your images:

1. Crop & Straighten
2. Sharpen
3. Contrast
4. Shadows
5. Vibrance

After making just those basic five adjustments, you should notice a huge quality boost in your image, as we did.

Here are the before (left) and after (right) images — which one do you think looks better?
Now that you’ve set up your photography studio, figured out a naming convention and have decided on your camera of choice, let’s talk about light — and how to use it to get the best possible product images.

Shaping light is a vital photography skill. I say “shape” for a reason: improving lighting doesn’t simply mean adding more wattage. It means selecting the right equipment and positioning for your product, budget and studio space.

When you’re deciding where to invest your dollars in product photography, first ask yourself two questions:

- What am I shooting?
- Where am I shooting?

Your needs will be different if you’re exclusively shooting still products in studio versus apparel on models in motion outdoors.

The answers to your “what” and “where” questions will determine:

1. Whether you need battery packs or AC power
2. What type of recycling time you need
3. If remote triggering is necessary
4. The importance of portability
5. How you handle safety concerns.

Keep those specifics in mind as we break down broader divisions.

What are the three main types of photography lights?

1. Continuous
2. Speedlight
3. Strobe monolight

Continuous Lighting

Continuous lighting works the way it sounds: your light stays on, continuously, as opposed to the powerful pulses of strobe speedlights and monolights.

Continuous lighting is not as powerful as strobe lighting, but it’s good for beginners because what you see is what you get. That makes it much easier to adjust lighting as necessary, and it’s also generally cheaper.

It’s most useful for still photography and video, which suits product photography well. You may also choose to use it with models for eye comfort.
Continuous lighting has its uses, like for beginners and video as we’ve discussed, but they are not as popular as strobe lighting options.

Strobes simply produce more power, and they pack it all into a very brief moment of time, allowing you to overpower other light sources (like the sun) and completely control your light.

Let’s take a look at two types of strobe lighting:

1. Speedlights
2. Monolights

Speedlight Lighting
Speedlights (or “speedlite”) are external flash units also known as an “on-camera flash.” Despite the name, they don’t have to be attached to your camera (although they often are).

Because speedlights are strobes, they produce an immense amount of light in an instant and then need several seconds to recycle before firing again.

That can be frustrating for beginners, who may have several false starts before getting the lighting just right.

For confident photographers, or photographers on the go, the power and flexibility of speedlights is well worth the wait. The increased light allows more varied aperture and ISO settings in a wider variety of environments.

There are three primary types of continuous lighting bulbs:

1. Fluorescent
2. Tungsten
3. LED

The choice between bulb types is mostly a matter of personal preference, as each has pros and cons.

- **Tungsten bulbs emit the most light in the broadest spectrum**, but they also emit an uncomfortable or even dangerous amount of heat and use the most power.
- **LED bulbs are easy and fast to set up**, but because they’re newer there aren’t as many accessories available.
- **Fluorescent tends to be the most common bulb in use in studio lighting**, they’re safer and more energy efficient than tungsten, they have lots of modifiers like softboxes available, and there’s no need for the portability of LED.

Whatever bulb you select, set your camera’s white balance accordingly and use a grey card to ensure your colors are captured as accurately as possible.

There’s a wide price range when it comes to lighting equipment for product photography. Here are good options for continuous lighting kits at a variety of price points:

- **$85 Flashpoint 2-Light Fluorescent Kit**
- **$105 Smith Victor Imagemaker Fluorescent Tent Kit**
- **$180 Bescor LED– 95DK2 Light Kit**
- **$385 Interfit Stellar INT188 Tungsten Double Softbox Kit**
- **$400 Flashpoint 600 LED Video 2-Light Kit**

You can give yourself even more control over your light if you look for adjustable power options.

Variable power may save you time and help you take better photographs by letting you adjust your light more subtly and quickly than removing bulbs. Some multi-socket kits will let you toggle select bulbs on and off to control your power.

Continuous lighting is good for beginners because you can see how light will affect your image before shooting, which makes adjustments easier. It’s also cost-effective compared to other lighting kits.

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For confident photographers, or photographers on the go, the power and flexibility of speedlights is well worth the wait. The increased light allows more varied aperture and ISO settings in a wider variety of environments.
The primary advantage of a monolight is that the head of the lamp contains its own power source, so you don’t need an additional generator or power pack.

It’s tidier, allows more positional flexibility and eliminates extension cables preventing power loss (estimated at about a ¼-stop of light each time you connect cable components).

Monolights are studio favorites, but they can be used for location photography as many of them are quite compact. It’s helpful not to be dependent on a single power pack, so that if one light’s power supply is blown any others will still be operable.

Strobe monolights are popular for model photography and product photography. They also usually come with a continuous lighting setting.

You can fire flashes from your camera or remotely, which leads into the next step of assembling your speedlight kit.

You need umbrellas, reflectors, and stands to complete your lighting kit. Here are two options at different scales:

• $150 Westcott Speedlite Kit (one softbox, stand, shoe mount)
• $500 Photoflex Speedlite Kit (two softboxes, stands, speed rings, shoe mounts, bag)

You can buy light stands and softboxes without lamps to use with your speedlight.

Whatever type of lighting kit you invest in, we recommend getting at least two sources to ensure you have ample light. The added versatility will allow you to be more creative and professional.
Next Steps
Lighting is product specific: you’ll use a different arrangement for metallic objects than you will for apparel.

Once you have your equipment, you need to know how to use it. With lighting, that largely means positioning.

Take reflective products as an example: you might backlight clear or colored glass, while you sidelight detailed glass, and overhead light metal objects, but we’ll cover this more in depth in a subsequent chapter.

<table>
<thead>
<tr>
<th>PROS</th>
<th>CONS</th>
<th>WHO’S IT FOR?</th>
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| **Continuous** | • What you see is what you get  
• Comfortably cool  
• Inexpensive | • Low power means less light and less control | • For beginners on a budget, working with models in-studio. |
| **Speedlight** | • Lots of light  
• Portable  
• Lightweight  
• Fire remotely | • Need time to recycle power between shots  
• Need accessories like stands, umbrellas, reflectors  
• Need power source (generator or battery packs) | • For a highly portable and totally customizable setup. |
| **Monolight** | • Lots of light  
• Fire remotely  
• Built-in power supply, stands, fans, umbrellas  
• Can be set to strobe or continuous | • Need time to recycle power between shots  
• Less portable than speedlight | • For uncluttered professional studios. |
Simple, subtle detail like the skilled use of shadows can elevate your product images from amateur to professional.

If you spend time on your product photography and the post-production process, your customers will feel more comfortable spending their time and money with you.

It doesn’t take a big budget or massive team to create professional product images; it just takes desire and attention to detail.

So far in this guide, we’ve covered:

- How to set up a product photography studio
- How to take product photos with your smartphone
- How to use light to get the best images possible

Now, we’ll show you how to separate yourself from the competition by adding shadows to your product images.

Product photographers view shadows as a nuisance most of the time. Shadows can obscure a beautiful product and make product photography look unprofessional. There’s a difference, however, between shadows on a product and shadows cast by a product.

Product image editing lets you use shadows to your advantage.

Realistic shadows that seem cast by your product can give it depth and make your product pop. They are a visual ecommerce image enhancer that add to the product without creating a distraction.

To do this, you can use natural light or add shadow later while image editing in Photoshop, but there are two unbreakable rules:

- Your shadows must look realistic.
- Consistency is paramount. Be sure to use the same type of shadow on all your product images within the same category.

Realistic shadows keep the focus where it belongs: on your product. Using the same type of shadow creates a clean and professional presentation on your product and category pages.

There are many types of shadows, but we’re going to focus on three particularly popular and effective choices:

- Natural shadow
- Reflection shadow
- Drop shadow

Which one is right for you? That depends on your product and your photography setup.

1) Natural Shadow

Nothing will look more realistic than your product’s real shadow, known as its “natural shadow.” Capturing natural shadow during the shooting process is almost always best, but it’s easier said than done for many products.

The shape of your product and the challenge of lighting it properly may prevent you from capturing a perfect natural shadow, but one can still be added in post-production.

Footwear photography lends itself well to natural shadow. With a little bit of planning and a few moments in Photoshop, you can create a realistic natural shadow that will make your footwear product look professional online.

The best way to create natural looking shadows is to use a light source while shooting the product. Make sure that the light source, whether daylight or artificial, is positioned to the side of your subject.

This enables it to cast the shadow at an angle from your product and give it a more three dimensional look. Photographing your product on a white background will also give the shadow greater depth.
When using natural shadows, the post-production work is minimal because your shadow already exists.

If you are unable to create a natural shadow by using lighting techniques, you can replicate one in post-production.

Follow the steps below and watch the video below to learn how to create a natural shadow using Photoshop.

Step by step instructions for natural shadow

1. Open your original shoe cut out image in Photoshop or similar, and then create a new layer with a white-fill background beneath the shoe image layer.
2. Select the white area around your shoe image to mask out the shoe from the background.
3. Refine the edges so it has a smooth transition.
4. Select the areas under the toe and behind the heel to create a curved layer mask. Feather the curved mask.
5. Darken your curves layer, using the Image –– Adjustments –– Curves tool to simulate the shadowing under your shoe.
6. Refine the mask a little more for an even better transition.
7. Carefully brush out areas of your shadow layer manually to achieve the desired look.
8. You may need to make parts of it less translucent than others, which may mean brushing certain areas more than others to make it look more realistic.
9. Finally, tweak your shoe layer mask by reducing its opacity a little so it doesn’t look so harsh against your shadow. This helps soften the shadow that may already be there to match the ones you have just created.

That’s it! If you don’t have the right product photography setup to create natural shadow, or if your product just won’t cooperate, you may want to try using reflection shadow or drop shadow.

2) Reflection Shadow

Reflection shadow makes your product look as if it was photographed on a reflective surface like a mirror. It can make your product images more visually appealing and create a sense of environment, so they don’t look like they’re floating in space.

Reflection shadow can be dramatic, which will help your product stand out from your competitors in multi-channel environments. It’s particularly effective with products that are commonly sold in stores with bright lights and reflective surfaces, like jewelry and sunglasses.

When photographing reflective products like sunglasses, it is important to know how to shape and control light to and other unbecoming distractions like light spots.

Reflection shadows are dramatic, but they aren’t particularly difficult to add. Let us show you how to add a reflection shadow to sunglasses.

Watch the video below to see how to create a reflection shadow in Photoshop.
Drop shadow, like natural shadow and reflection shadow, will keep your product from simply floating on a plain background. It’s a subtle effect that adds a professional touch by creating depth for your product.

Let’s take a look at how we can use drop shadows with home furnishings to make furniture product images pop off the page.

Watch the video below to see the drop shadow technique in action and read afterwards for step by step instructions.

Step by step instructions for natural shadow

1. Create a new layer and fill it with a white background.
2. Move your newly created white layer to the bottom of the layer stack.
3. Duplicate the sunglasses layer so that you have two sunglasses layers.
4. Make a tight selection around just the sunglasses and refine your selection’s edges to be less harsh.
5. Rotate your duplicated sunglasses layer 180 degrees (upside down, vertically). You should now see two pairs of sunglasses between the two layers: one right side up and one upside down.
6. Align the bottom of the sunglasses together so the upside down pair of sunglasses looks like a reflection of the other pair.
7. Add a mask to the upside down sunglasses layer and use the gradient tool. Play with this tool until you get the desired look.
8. Make sure the most opaque part of the sunglasses is nearest to the eye frames of the right side up sunglasses, and the least opaque part is farthest away from the sunglasses. This will help to create a natural reflection that falls off the farther it is from the subject.
9. Brush out the sides and top of the sunglasses around the reflected sunglasses’ base.
10. Continue to tweak your reflection, brushing out more or adding more back in to make it look natural.
11. Flatten the layers.

These steps will create familiar and realistic depth that adds pop to your sunglasses product images.

If you can’t capture a natural shadow, and if your product doesn’t seem like a good fit for reflection shadow, try using drop shadow.

3) Drop Shadow

Drop shadows imitate direct sunlight from above, and are both popular and effective with a wide variety of products.
14. Refine the edge of your selection by feathering it a lot to allow for a nice gradient.
15. Brush in some of the sides to allow for a nice fall off under your chair.
16. On the front two legs, make a slim “v” shaped selection. Refine this edge and feather your selection.
17. Create a curves layer and darken it so it looks like a shadow. Do this for both legs in the front.
18. Flatten your layers and save your new file.

Do you have a product that wasn’t featured in this post? Learn how to apply natural, reflection, and drop shadow to:

- Jewelry
- Purses and handbags
- Scarves

It’s worthwhile to try every type of shadow and see which one you prefer, but remember to always use the same type of shadow through a product category and keep your shadows realistic.
Photographing highly reflective products like glass, gems and metals can be as easy as photographing non-reflective products if you know how to shape and control light.

In this tutorial, we will demonstrate:

1. Backlighting
2. Side lighting
3. Double overhead lighting

We will use different products to demonstrate how to correctly light reflective objects and improve your product images to boost your sales.

1) Backlighting: Photographing Clear or Colored Glass

There are a few different ways to photograph glass, but the most flattering and visually striking method is to light a glass product from behind.

This simple technique is called “backlighting,” and it will flatter any glass product by taking advantage of translucency to give your product that pleasing “crystal clear” appearance.

Studio Setup
You will need a decently sized shooting area to create a backlighting setup, especially since you will be handling a fragile product.

Do your best to safety-proof your studio by taping down light cords, and make sure to use a sturdy table or platform to elevate your product in accordance with your light source.

Here’s how to set it all up:

1. Position your light source behind the product so that the brightest area of light shines directly through the glass and emphasizes the natural outer lines and curves of each piece. If you have trouble leveling the light and the product, try lowering your light or elevating your product with a block.
2. Use continuous lighting or strobe lighting — either way is fine because you will be utilizing a tripod.
3. Next, you need to “diffuse,” or soften, the light source with an umbrella and/or several layers of rolled paper or thin white fabric. Position the white paper or fabric between the product and the light and supplement that by placing white foam board under the product and to both sides.
4. The foam board will help to reflect light back onto the product and cause it to wrap around the subject softly.
5. We suggest adding an additional piece of white paper or fabric on top of the setup in order to reflect light onto the subject from above as well.

Think of this “box” lighting setup as trying to imitate soft window light — you want the light to wrap around your subject evenly without creating harsh “white spots” or distracting reflections.
For bolder outlines and colors, try using black foam boards to either side of your product. This will saturate your colors and emphasize the edges of your glassware.

In the image series below, you can see the differences between:

- using no foam boards on the sides
- using whiteboards
- using black boards
- using black boards pulled in tightly next to the product.

Most notably, you will see that the outer black line of the vase gradually becomes more defined as foam boards are added, darkened and moved in closer.

Camera Settings

Adjust your white balance using your camera’s internal shooting menu according to the style of lighting implemented in your setup.

In this tutorial we will be using strobe lighting, so we have set our camera’s white balance to the flash setting to compensate for the blue cast of the strobe’s bulb.

When in doubt, use your automatic white balance setting.

You will be focusing on one of the outer parts of your glassware because your camera’s autofocusing system needs a defined object to focus on.

1. Choose some element of your subject that is noticeable and will be easy for your camera to recognize. In our example, we have focused on the bottom edge of the vase since it is darker and more apparent.

2. We recommend shooting in Manual mode, which will allow you to have total control of how your camera interprets light and records your images. You will want to set your aperture to f/11 or greater (like f/16) in order to capture as much detail as possible.

3. Similarly, use the lowest ISO (like ISO 100) setting possible to preserve the most detail and prevent unappealing grain that begins appearing in images captured at higher ISOs.

4. If you are using continuous light, you may choose to use your camera’s meter reading in the viewfinder to dictate your shutter speed.

5. However, since it is important to overexpose, or “blow out,” backgrounds in backlit images to properly expose your subject, you will probably need to adjust your shutter speed down one or two stops from what your camera’s light meter recommends.

See the image series below for an example.

Don’t be afraid to take test shots and spend some time making small adjustments to your setup and camera settings in order to capture the best images possible and promote your products.

In order of photo: No boards, White boards, Black boards, Black boards in closer

In order of photo: Too much light, Perfect, Too little light
Post-Production Processing
Backlighting should blow out any imperfections on your glass product, which will greatly simplify your post-production workflow. If any spots or smudges are visible, clone them out. After that, work on desaturating and cleaning up your background to pure white.

These simple, quick touch-ups will make your images look much more professional.

The following images were shot with the same “box” backlighting setup that we demonstrated earlier in this tutorial, which you can see is flattering to each piece.

2) Side lighting: Photographing Detailed Glassy Products

Photographing glassware is easy because you’re able to overexpose the glass itself, but other reflective products like sunglasses and watches contain details that you cannot blow out with backlighting.

These types of products need to be lit differently so that customers will be able to see the full product that you are trying to sell.

Studio Setup

1. You will need a large table to set your product on and one large light diffused by an umbrella positioned to the left of your product.
2. Next, hang white rolled paper so that it sweeps down underneath your product; for best results, connect the end of the sweep to the bottom of your camera lens to reflect some light back onto the product and eliminate any foreground reflections.
3. Much like the “box” backlighting setup, you will need to place foam board next to the product on the side opposite from the light source, which can be either a continuous lamp or a strobe. It’s best to tape two pieces of foam board together into a “V” to funnel the reflected light around the product and achieve soft, even light.

The product photos below demonstrate both bad and good lighting techniques.

Bad. The reflections here will distract customers from the product and lower perceptions of its quality.

Good. Attaching white paper to the bottom of the camera lens allows for a more becoming reflection.
To achieve the effective lighting in the watch photo on the right, we moved our light source from direct side lighting to 45-degree side lighting so that the watch's face would become brighter without causing a spot glare on the face.

You will also need to utilize a tripod with this setup to keep your image framing consistent.

1. Position your camera slightly higher than you would to light a backlit glass product so that you are shooting slightly down at your product. This will eliminate reflections and allow for a flattering angle of your product.
2. As always, make sure that your product has been cleaned thoroughly.

Camera Settings
As with the backlighting setup, you will need to adjust your white balance according to the type of lighting you are using (e.g. tungsten, fluorescent, daylight, etc.).

1. Focusing is easy with sunglasses and watches because these products contain more detail for your camera’s autofocus to lock onto. Focus on the center part of your object and use an aperture of at least f/11 to get the sharpest images.
2. With side lighting, it’s fine to simply follow the promptings of your camera’s light meter to set your shutter speed. If you’re having trouble finding the right settings, set your camera to Aperture Priority mode and your camera will optimize shutter speed for you.
3. Don’t forget to set your ISO to the lowest possible setting. If you’ve taken our advice to use a tripod, you should be able to use ISO 100 without a problem.

Post-Production Processing
Proper execution of the side lighting technique means that you should only need minimal post-production processing of your images.

Make sure your product is free from smudges and dust specks, the background is pure white with no shadows or spots, and the color of your product is accurate.

This is also the time to clone/heal any defects or damages to the sample you weren’t able to fix prior to shooting, such as hardware scratches and scuffs.

Don’t be afraid to select your product, place it on a white background, and add your own shadows if needed.

If you are going to sell your products in marketplaces like eBay or Amazon, make sure to comply with their image standards to get better results.

The images below were all shot using the side lighting technique.

3) Double Overhead Lighting: Photographing Metal Objects

Metallic objects are the most difficult to photograph due to their high reflectiveness.

With most metal objects, you are able to see all the surroundings on the object’s surface.

The following lighting technique should help you to successfully photograph smaller metal objects without those distracting reflections.

This two light setup looks complicated but can be broken down into easy steps.
Studio Setup

1. Place your object on a sturdy surface, such as a table or block, and position two large studio lights next to it, one on either side. Both lights should be diffused with umbrellas.

2. You will then need to hang a white sheet of rolled paper behind the product so that it sweeps underneath the product and attaches to the bottom of your camera lens. This will block any fall off reflections coming from the foreground and reflect more light back onto the subject.

3. No foam board is necessary for this setup, since you’ll be relying on two diffused lights to softly illuminate the product. Position your camera on its tripod so that you are shooting slightly down at the product, as with the side lighting setup.

4. We recommend using strobe lighting for metallic products because strobes allow for more lighting control, but continuous lighting will suffice. Whatever you decide, position your lights above your product to either side, angle them down at the product, and set them to the same power. This, along with the diffusing umbrellas, will help to evenly fill the frame with light without creating ugly bright spots on your product.

5. Before you begin shooting, make sure to wipe away any fingerprints or smudges you created on the product while positioning it in the shooting space. You can spot clean the product as you go, but if possible, wear gloves to eliminate this step.

Camera Settings

1. Use a large aperture of f/11 or greater and a shutter speed that properly exposes your product according to the light meter in your camera’s viewfinder.

2. Set ISO as low as possible, preferably ISO 100, and focus on the center of the product to ensure that you get everything in focus.

3. Auto white balance usually works fine, but it is worthwhile to consider manually adjusting white balance according to the “warmth” of bulb used by your light sources.

Post-Production Processing

Post-production processing should be relatively straightforward.

1. Use healing and cloning tools to eliminate smudges, fingerprints, dust and other types of imperfections and damages to make your product look its best.

2. Pay special attention to color accuracy and, above all, make certain that your background is clean and white.

The images below were shot using double overhead lighting.

As you can see below, ineffective lighting is very ineffective for metallic products, so mastering the two light setup is of paramount importance.

There are many ways to light reflective objects, but these three simple lighting setups can help your product images wow customers and stand out from the crowd.

Sometimes the post-production process can feel tedious and lengthy, especially if you feel that your product images need extensive work to look their best.

If you’re feeling overwhelmed, try outsourcing your post-production processing to a company like Pixelz who can make your images shine with very fast turnaround. Outsourcing can help to alleviate some of your post-production processing workload so that you can focus on mastering lighting techniques and making sales.
Using mannequins for your product images is an efficient and cost-effective way to promote your products.

Mannequins allow your products to hold their shape, which can make product images seem more professional and consistent — thereby increasing their desirability to customers.

However, mannequins can be distracting, so a great alternative is to create a ghost mannequin effect for your product images, like the ones below.

Using Your Phone as a Camera

Most smartphones in today’s market come equipped with great cameras. If you’re one of the many consumers who have purchased one of these devices, then you have a high quality DSLR alternative right at your fingertips.

What are the best phones for taking photos? Below are a few smartphones that have great camera features for product photography:

At first glance, this type of image may appear difficult to reproduce, especially for nonprofessional photographers. Like most challenges, it becomes achievable when you take each step one at a time.

In order to create the desired effect, we will follow a simple process that consists of combining two images of the product. It’s important to understand how you need to photograph your products in order to make the post-production process more effective.

Follow this simple start-to-finish guide and learn how to use post-production image editing to create a “ghost mannequin effect” for your ecommerce product photography.
How to Create the Ghost Mannequin Effect

1. Selecting and Posing a Model or Mannequin
One of the most common processes in fashion photography is to use models or mannequins to showcase the unique shape and fit of each product.

However, it isn’t always effective to actually show the model or mannequin in every image. Retailers sometimes opt to photograph their products being modeled and remove the models and make the mannequins seem invisible later in Photoshop.

For smaller retailers who do the majority of their image editing themselves, removing models and mannequins can be a difficult technique to master.

In order to create the “ghost mannequin” illusion (also known as “invisible mannequin”), you will need to first photograph your product being worn by a model or a mannequin from multiple angles. The plus side to this is that you will be able to use these images in your product galleries alongside any “ghost” images that you create.

If you decide to use a real model, make sure to use a static pose, as shown above.

Additionally, your model should be styled minimally, and long hair should be tied up so that it does not obstruct viewing of the product. These details will make image editing much easier.

There is a wide variety of mannequins you can choose.

The best mannequins are lifelike and static, as shown above.

Depending on your needs, you may choose to purchase a mannequin with or without arms, hands, legs or neckline. If your mannequin does have arms and hands, then make sure that the limbs can be positioned out of the frame.

PRO TIP
White matte mannequins tend to be non-reflective and can be made to blend into white backgrounds, which will make editing the mannequin out of the image a much easier task.

Make sure that your product fits your mannequin or model by using the right size or styling the garment to fit correctly. Also, if your product has sleeves, make sure to position the sleeves downward so that the viewer can’t see down them.

2. Setup and Equipment
In order to execute the ghost mannequin technique, you need to be able to create high quality photographs in a studio setting.

The lower the quality of your photographs, the less appeal the ghost mannequin effect will be able to add to those images. Camera and lighting techniques, equipment, and placement all come into play here, depending on each particular product that you’re shooting.
Using a telephoto zoom lens to capture your images can help to minimize distortion and provide you with the flexibility to move closer to smaller objects and move farther away from larger objects.

Make sure that your studio shooting space is large enough to accommodate your camera and tripod for invisible mannequin shoots: two studio lights and umbrellas spaced evenly apart on either side of the product, and backdrop.

To create a 3D image with the ghost mannequin technique:

1. First capture a front and back view of your product being worn by your mannequin or model.
2. After that, style and hang your product on a piece of white foam board and photograph both the front and back views again; these foam board shots will allow you to include the inner areas of the garment once you combine the images together, as shown below.

For collared shirts and similar products, make sure the top is open and the inner back is clearly visible. You may even want to turn it inside out in some instances.
3. Refine and Place Your Mask
Once you have selected the entire product, refine your mask so that it is nice and tight, removing all of the background and mannequin.

This can be accomplished using the “Refine Edge” tool in the “Select” menu.

Click “OK” in the “Refine Edge” dialogue box and place a mask on your shirt layer.

At this point, you should see your product floating freely on the white background that you created in the beginning.

If necessary, refine the mask slightly more and/or refine the product’s edges again to give it a nice, clean look.

4. Rinse and Repeat Previous Steps with the Foam Board Image
Now it’s time to switch gears and repeat Steps 1, 2 and 3 on your foam board product image.

This type of product image may seem a little odd at first, but having one to work with is important; photographing the product inside-out will allow you to show the inside back of the product, completing the mannequin illusion.

We promise that it will look great in the end!

Create a new layer, select out the product, and create and refine your mask.

5. Combine the Images
When both images contain tight, clean masks, drag the mask from your foam board image over to the image of your ghost mannequin product image.

Organize the layers so that the foam board image is lower than the mannequin image.

Then, adjust the positioning of the foam board layer and adjust its proportions so that it fits perfectly behind the mannequin layer, just below the shoulder in a rounded curve.

6. Remove Unnecessary Parts of the Foam Board Layer
At this point, it’s a good idea to hide your mannequin layer and brush out the unneeded parts of the foam board layer.

You really only need to keep that neckline triangle between the shoulders. In the video below, notice how the string across the back is showing as well.

It’s important to remember to remove that piece in the foam board image because it’s already in place in the mannequin shot.
Once you’ve done this, double check that your layers are clean and that nothing is out of alignment — especially in the neck and shoulder area.

7. Add Shadows and Save
Finally, add a shadow between the two layers to give the product some depth, and save a copy of the Photoshop file with all of the layers intact, just to be safe.

Once you’ve saved the layer file, flatten or merge all of the layers together and save the image again as a different file. This final step will make your image look professional and realistic.

If the editing job is done well, you will end up with an amazing 3D effect like the ones below that will improve your product photography and help you increase sales for your online store.

Want to see all seven steps in action? Watch the tutorial below for a step-by-step guide to the process.

As you can see, if you follow the steps, you can create your own professional apparel product images having the ghost mannequin effect. To see examples with all kinds of different apparel, you can download this complete guide to ghost mannequin product photography.

Remember that this effect on your product images will not only make your products look more attractive and unique, it will also bring the look of your online store to a highly professional level. You will elevate your brand in customers’ eyes, and that will elevate sales.
We’ve edited over fifteen million product images at Pixelz, and the statistics are pretty clear:

Ecommerce site owners love white backgrounds.

We analyzed seven million images and found that 76% had their original background replaced with pure white. An additional 16% removed the background and opted for transparency, while the bulk of the rest simply stuck with their original background (usually white).

There are plenty of great reasons to shoot on a pure white background and remove it in post-production.

- It’s consistent
- It’s clean
- Colors are true
- File size is minimized

It’s also boring.

Calm down: we love white backgrounds, too. We preach the advantages of removing the background all the time; we even used to be named “Remove the Background.”

That said, there’s a big difference between category pages and product pages, and there’s room for creativity in ecommerce.

One size does not fit all.

If you’re itching to try something new, or looking for creative ways to brand your category pages and product images, here are four alternative approaches to white or transparent backgrounds that successful companies are using today.
1. Solid Color Backgrounds - Zara

Zara likes to mix in solid colored backgrounds on their category pages, alongside traditional white and neutral backgrounds.

Most sellers are worried, quite rightly, about creating color confusion for the customer. Zara avoids that problem by using colored backgrounds mostly with solid black or white products.

When a product has subtle patterns or color variations, they use a more traditional white or gray background.

Zara sometimes uses dramatic solid colored backgrounds, particularly when the product itself is solid black or white.

Zara stays neutral for subtle color variations, then goes dramatic again for a solid white product.

Ensure accurate white balance during photography by using a grey card and adjusting your camera settings.

Colorfully patterned products need a neutral background for accurate perception.

You can be certain that all the product images with a colored background were shot against a white or gray backdrop, and then colored in post-production. In fact, all Zara’s product pages (as opposed to colorful category pages) feature product images on a neutral background.
2. Themed Collection Backgrounds - Shabby Apple

Shabby Apple produces themed collections, like “Blossom Bright” and “Silver and Ice.” All photos of products within the collection share context — they’re shot in the same studio or at the same destination location.

Shabby Apple’s “Blossom Bright” collection has a consistent themed background matching the brand and collection’s aesthetic.

Using themed backgrounds can be an effective branding strategy, but remember: your product is the star. Don’t make your background too busy, or too different from photo to photo, or it will turn into a distraction.

Shabby Apple’s light yellow and off-white flowers on a white wall, with subtle related propping like holding a flower, is a nice example of supporting your product without overwhelming it.

Free People uses lookbook images taken on-location on their category pages.

3. Destination On-Location Images - Free People

Free People uses on-location lookbook images on their “Dresses” category page to create a complete vision for their brand. Shots are on-location with models in motion, and images for that item are from the same shoot and show alternate angles, maintaining continuity for shoppers. Building and propping a studio location allows you to control light and create consistent images.

On the product page, alternative images have more traditional backgrounds.
interacting, styled and propped. Taken together, the images tell a story.

Shooting on-location is considerably more expensive and slower than studio photography. Even a brand like Free People, selling dresses at a $700 price point, doesn’t use on-location images everywhere.

As you can see on the left, the alternate shots of a dress on the product page are more traditional studio images.

How much might it cost you to shoot a lookbook? Well, to start with, probably several thousand dollars a day for just a photographer and model. If it’s a destination shoot, you’ll need to pay for airfare, accommodations, on-site travel and food for your entire crew. Costs can get pretty steep in a hurry.

The best advice I can give here is to tell you to find the right photographer. Don’t get too cheap out there, or the rest of your time and money will be wasted. If you have to cut corners to save your budget, do it somewhere else — like shooting locally instead of traveling.

You’ll be able to use your lookbook images a variety of places. Throughout your website, in emails, on Instagram and other social networks, in a brick-and-mortar store if you have one, in catalogs — everywhere, really.

A lookbook will cost you, but it’s worth it.

Learn how to plan and shoot a lookbook for fashion.

4. Instagram - Trend Director

Trend Director uses their own Instagram feed to create a shoppable, constantly updating homepage. It’s a modern approach with a plethora of benefits.

The less formal nature of Instagram, and the way each image is expected to be self-contained, allows for a huge variety of settings. The images aren’t expected to be visually consistent, so long as they stay on brand.

It’s also a good way to gain followers to your Instagram feed. Once you get to the actual product page you get a more traditional white or neutral background, along with alternate angle and detail shots. That allows your customer to get a more complete understanding of your product, and reassure themselves regarding style and fit before placing an order.
Neutral Backgrounds Still Rule Product Pages

As you probably noticed, most of these approaches are for category pages and their equivalents.

Once you get to an actual product page, product images most often have white, transparent, or neutral backgrounds.

Removing the background makes your images more consistent, removes distractions, and minimizes file size.

Plus, many marketplaces require white or neutral backgrounds for product images, and you really don’t want to reshoot for different channels.

If you’d rather spend your time and money on creative photography in order to brand yourself, consider outsourcing your product image editing. The ability to scale up or down with seasonal needs, pay per image, and get processed images back in under 24 hours will simplify your workflow.
When it comes to retouching images, there’s no need for a lengthy intro. Nor are we going to bother with a discussion of fundamental image edits because we’ve already covered that in the others chapters in this guide and we’ll assume you are following general best practices. If not, you can get caught up in the subsequent chapters where we cover:

1. How to build your own product photo studio (including the equipment you will need)
2. How to use your smartphone for product photos, if that’s all you have
3. How to shape light
4. How to add shadows
5. How to photograph highly reflective products
6. How to remove white backgrounds
7. How to master ghost mannequin photography

If you come across a term you don’t recognize, refer to our retouching glossary.

Instead, this chapter focuses on more advanced techniques, broadly categorized as retouching. We’ll walk you through popular retouching choices for three common ways to shoot apparel:

1. flat
2. on a mannequin or hanger
3. on model

Let’s focus specifically on garment retouching (divided into light, medium, and heavy levels), before finishing with a discussion of model skin retouching.

Note: This isn’t a how-to; it’s an exploration of what retouching is and what it can do for you.

We’ll discuss best practices, but just as in photography, many retouching decisions are driven by your brand’s aesthetic.

Outdoor apparel may call for a raw natural look, while luxury brands favor a more glamorous appearance.

We won’t try to make those decisions for you; we’ll simply present you with options and explain why each route might be favored.

At Pixelz we’ve edited over 15 million images for leading brands, retailers, and commercial photo studios. The principles we’re discussing here are based on our experience, but should not be taken to represent any of our clients. All opinions expressed are our own.

Garment Retouching

The principles of garment retouching are largely the same regardless of whether you’re shooting flat, on a hanger or mannequin, or on-model. Your biggest concerns are cleanup and shape.

No matter how much time a stylist takes on prep, samples aren’t going to be perfect.
When you're shooting samples, well, your photos aren't going to be perfect right out of the camera.

Your stylist may be able to fix some problems through product photoshoot preparation, pinning, and clever arrangements, but what do you do when the fabric is too sheer, the color is off, or one leg is longer than the other?

Retouching can solve problems that can't be handled in the studio (as well as simplifying many that can).

Let's take a look at some common retouching processes, broken down by level. We'll also talk about two techniques that fall outside of basic level categorization:

1. symmetry
2. ghost mannequins

Light Retouching: The Fix It Up Process
Light retouching focuses on cleanup, which means removal and replacement of obviously unwanted details. In this scenario, there are few aesthetic decisions to be made and you're essentially performing repairs.

You should almost always remove evidence of styling, wear, and construction problems. That means removing dust, pins, untidy stitching, and loose threads. It also means removing heavy creases like packaging creases, or creases from styling (like if a trouser leg has been shortened by a stylist with a mid-leg fold).

Light retouching also involves recreating areas after removing small props, like hangers, wire hands, or mannequin cutaway necks.

**WHEN TO USE LIGHT RETOUCHING**
If you have a modest budget, you should be performing this level of retouching. Showing someone a worn down sample with pins sticking out of the shoulders isn't accurately representing your product.

Medium Retouching: The Low Hanging Fruit Process
Medium level retouching also focuses on cleanup, but starts to move into shape smoothing as well.

You're doing everything you did at the light level, while also making more subjective/aesthetic decisions to proactively improve your image.

**WHEN TO USE MEDIUM RETOUCHING**
We recommend this level of retouching in most instances. You get all the cleanup of light retouching along with improvements that are relevant to almost all product images. If you have special challenges that aren't addressed at this level, you can up the ante to heavy retouching.
Heavy Retouching: The Image Detailing Process

Heavy retouching focuses in on details like shadowing, imprints, and consistency.

Again, you’re doing everything you did at the medium level while adding additional retouching.

Sometimes undesirable imprints can appear and create confusion about what’s part of a garment and what’s caused by outside factors. For example, sheer fabric can show visible outlines of mannequins, undergarments, nipples, and pockets. Retouching can eliminate those distractions.

Retouching can also ensure consistent shape is given to edge lines like sleeve cuffs, trouser cuffs, waistbands, and hemlines.

By consistent shape, I mean something like always curving in, curving out, or staying straight.

Consistency is pleasing to the eye and shows an attention to detail that builds credibility with customers.

Symmetry

Many human standards of beauty are based on symmetry; for example, numerous studies have proven that more symmetrical

Using silhouettes for retouching can create extremely consistent shape.

Note that a heavily retouched image still isn’t one you look at and say, “Wow, that looks plastic!”

“At no point should anyone ever look at one of your product images and think it’s fake. That immediately kills your credibility with the viewer, and with no trust there’s no sale.

To explain heavy retouching, let’s think about it in terms of creases, always one of the biggest issues addressed by retouching.

At the heavy retouch level, you’re not just removing obvious creases; you’re also reducing hard shadows, contrast, and highlights caused by creases. It’s a more subtle approach that can improve images with difficult fabrics, like laminated jackets.

| Before and after of retouching to ensure a symmetrical shape in product images. | Using silhouettes for retouching can create extremely consistent shape. |

“Note that a heavily retouched image still isn’t one you look at and say, “Wow, that looks plastic!” That’s not heavy retouching, that’s bad retouching.”