Have you ever looked at a real estate listing online and found you were disinterested by poorly lit, noisy or badly composed photos? How about looking at a product like a diamond ring or article of clothing and noticing that a blurry or low resolution photo somehow diminishes the quality of the product itself?

Whether we humans consciously admit it or not, good photography matters. It can affect our mood, our decisions, and the way we feel about and interact with the world around us. From a marketer's point of view, it's one of the most important criteria for tailoring messages to our customers - making sure the imagery we use has the intended effect on the viewer.

This guide exists to give marketing professionals the equipment and skills to make their product/service look its best while keeping within a budget, and will be split into three main sections:

1. Equipment - which camera and accessories are the best for your marketing needs?
2. Tips & Tricks - overall good practices that apply to all photography.
3. Software - what can you use to edit your photography?

Disclaimers:

1. *The purpose of this guide is to be a simplified summary of photography equipment and methods for marketers that want to be able to take better photos for their marketing campaigns or advertising, but at the same time do not want a full fledged photography lesson.*
2. *This guide will maintain focus on photography, not video (although many of the current DSLR cameras offer a decent video capture option).*
3. *This guide and all the recommendations can (and should) always be passed through the filter of "knowing your customer." The kind of camera or lens you choose will reflect the kind of photography you need for your business. The kind of software you use will depend on how you plan to edit and share your photography. As you read through the rest of this guide, be reminded that what works best is what works best for your message, and showing your customers the products and services in the best light possible (pun intended).*
4. *The author is not a professional photographer, but a print and web designer with plenty of experience in advanced DSLR camera use and photo editing software.*

Preface: Why does good photography matter?

Some would say "my cellphone takes good enough photos, why should I worry about it?" The answer lies in the human mind's complex processing of images, and the resulting psychological and emotional responses. A degree in neuroscience isn't required to agree that images can affect the way we think, the way we feel, even the way we behave. It's the reason a photo of an old man and his grandson fishing off a dock can make some of us feel nostalgic, and a photo of an impoverished orphan in torn clothes with a dirt-smudged face can make us feel somber. Since the beginning, advertising and marketing agencies have been using our hard-coded

emotional response to colors, shapes, and imagery to sell, inspire, or call to action.

Does this mean you need to put pictures of sad puppies next to your products to sell them? That depends on your business. For most marketers, the acknowledgement that photography can affect the viewer's psychological and emotional state is the first step to taking better pictures. Knowing that, it's not a big stretch to assume that poorly lit, blurry, noisy, over exposed, or poorly composited images can have a negative effect of the viewer's interpretation. For a proven example, click here to check out this article about how good real estate photography sells homes: http://www.buzzfeed.com/rachelwmiller/these-photos-show-just-how-much-real-estate-photography-matt#.hveOdDBy5z

So how do we start taking better pictures? By learning basic rules for composition, color, and light, and using equipment that provides more quality and flexibility (without breaking the budget). Let's start with the equipment:

Section 1: Equipment

When deciding which camera to purchase, the options usually fall into three categories: DSLR, "point and shoot" digital, and smartphone. Some marketers might be using cell phones to currently take their photos, but hopefully most are at least using a point and shoot digital.

DSLR cameras have become the standard for many professional photographers as well as amateurs, replacing rolls of film with SD cards and digital images. Digital SLR cameras can capture photos that are on par with almost any film camera by using large sensors, mechanical shutters and apertures, and high quality interchangeable lenses. While DSLR cameras are definitely on the higher end of the budget, their quality compared to most "point and shoot" digital cameras will be immense, and cellphone cameras won't even be in the ballpark.

I will be basing recommendations on DSLR cameras instead of point and shoot digital. While point and shoot digital cameras have many great offerings, DSLR cameras have reached a price range that makes them the obvious choice for modern marketers.

How Cameras Work:

Most DSLR cameras follow the same mechanical process to capture images. When the shutter button is pressed, the shutter opens and the internal mirror flips out of the way to allow light to flow through the lens and record information onto the camera's image sensor. That information is parsed and then saved to the camera's memory for later use. All cameras, whether they are DSLR cameras, point and shoot cameras, or even cell phone cameras use the same general method to capture images. The differences lie in the quality of components that determine the photo's size and quality, and the mechanical or digital processes that save image data.

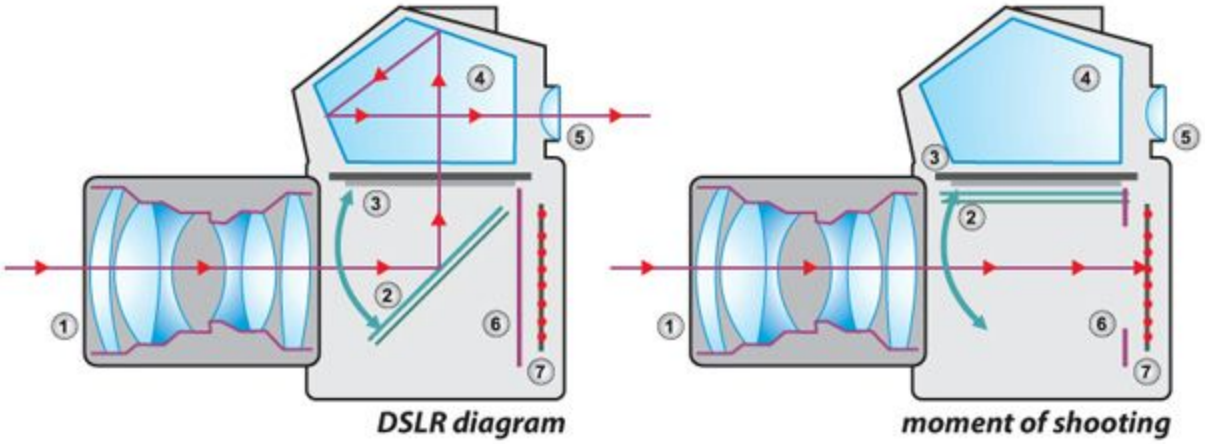


Image from http://thebahamianphotographer.com/
1 - Camera lens (aperture) 2 - The viewfinder mirror before shutter is pressed 3 - Viewfinder mirror after shutter is pressed 4 - pentaprism mirror for viewfinder 5 - Viewfinder eyepiece 6 - Shutter 7 - Image sensor

For example, DSLR cameras typically have better lenses, better image sensors, and a mechanical shutter that allows for faster shutter speeds. Cellular phones and most point & shoot digital cameras, on the other hand, typically have poor image sensors, slower digital shutters, no viewfinder mirrors, and subpar lenses (although they have taken many leaps and bounds in overall quality in the last 10 years).

For a glossary of camera terms, go to the end of this guide.

In the following recommendations we will assume a budget of about $1200, which is a larger initial investment, but it is exactly that - an investment in better photography that will improve the quality of your marketing materials. There's no rule that says you have to buy all the components at once either, you can always spread the purchases over a longer period of time.

When talking about DSLR, most people recognize the two biggest players - Nikon and Canon. There are of course many other manufacturers in the arena, but for reasons of simplicity and my own experience, I will attempt to find comparable Nikon and Canon models. For most people, choosing between Nikon and Canon comes down to personal preference. I've read that Canon cameras are easier to use for amateurs while Nikon is better for those that want more manual control. I've also read that Nikon makes better camera bodies and Canon makes better lenses. In the end, the two manufacturers essentially maintain a head to head position, and both options would be more than acceptable for today's marketing standards. We at AlphaGraphics Billings have chosen Nikon cameras to be our main marketing and photography choice.

Generally as you go up in the price chain of DSLR models, you'll find the feature commonly upgraded is simply access to more advanced controls. While the lower models allow you to make changes to shutter speed, aperture, and ISO in menus using the LCD screen, higher end models build in mechanical ways to quickly make changes, such as on-the-body ISO buttons or dedicated scroll wheels for aperture and shutter speed. Some higher models also tack on frills like wifi or gps integration, but unless these are specifically useful to your industry (which in most cases are not), then you can overlook them and concentrate on the specs that matter, such as resolution and sensor size, lenses, and control options. What we're hunting for in this article is a camera body that will provide quality results in a no-frills package at a reasonable price.

Nikon D3XXX to D7XXX Series: Nikon actually makes a very decent range of "prosumer" DSLR models. Starting with the D3200, Nikon has created a line of cameras that offer high resolution images in a compact body for under $500. When deciding between the various models, it comes down to specific features and ease of use.

Currently we at AlphaGraphics use the **Nikon D3200**, which at the time of this writing is available with two zoom lenses for $499.99 (which is a pretty good deal). If you have a bigger budget, I would recommend the **Nikon D5300** for $899 which includes a slightly bigger sensor, LCD screen, and more capture modes. Both models offer high definition video capture. If your budget is a bit higher, the top of the prosumer line is the **D7200** for $1499, which has some nice improvements over the D5300. Read more about the differences on digital camera world's blog here:

http://www.digitalcameraworld.com/2014/03/14/nikon-d5200-vs-d7100-14-key-differences-you-need-to-know/

While doing the comparison for the Nikon models on bestbuy.com, I noticed that the four I chose (D3200, D5300, D7100, & D7200) had at least a 4.8 out of 5 star rating. They are typically extremely well received and reviewed by both professionals and consumers. It's important to make sure the camera you choose has a consistently high review rating. You can view the entire line of current Nikon DSLR models by visiting their website here: http://www.nikonusa.com/en/Nikon-Products/dslr-cameras/index.page

Canon EOS Series: Canon offers a comparable line of "prosumer" DSLR cameras, starting at the low end with their **Canon EOS Rebel T5** for $450. Compared to the Nikon D3200, it has a smaller megapixel rating, but should provide a comparable experience in image quality even if a bit smaller in pixel dimensions. It also has very favorable reviews. **The EOS Rebel T5i** at $650 boasts a variable angle touch screen LCD, higher ISO range, and a better image processor.

On the high end, the **EOS 70D** at $1099 has a faster shooting speed, more powerful image processor, faster shutter speeds, and a higher megapixel rating. On bestbuy.com you'll find that all three models mentioned here have at least a 4.7 out of 5 star rating, so as mentioned above, it really comes down to personal preference. You can view all of Canon's current models on their website here: http://shop.usa.canon.com/shop/en/catalog/cameras/eos-cameras

Many large retailers have regular sales and package deals on camera body and lenses, so it would be unwise to pay full price for a DSLR. Make sure to check websites like bestbuy.com, costco.com and target.com to find great deals on DSLR packages.

Another feature to be aware of when shopping for DSLR cameras is the lens compatibility. Most packages come with at least one mid-range zoom lens, but if your plan is to purchase more lenses as time goes on (more on lenses later), it's important to know if the camera is compatible. For example, the comparatively slender Nikon D5200 does not have an autofocus motor in the body of the camera, and relies on the lens to autofocus. Nikon lenses that have this ability are denoted by the "AF-S". "AF" lenses do not have an autofocus motor inside, and must rely on the camera body. For Canon, the lens feature that you need to check is whether or not it is an EF-S lens, which is essentially a smaller form factor. When purchasing a Canon DSLR, EF-S will typically be in the description. For example, on Canon's website the EOS Rebel T5 EF-S 18-55mm IS II Lens Kit is compatible with EF-S lenses. Most Canon EOS models are compatible with both EF and EF-S lenses.

While maybe not the most important decision you'll make when starting the quest to improve your marketing photography, the camera you use can determine the quality, size, and reusability of your photos. The above recommendations are by no means the only choice, but they provide a decent balance of quality and features for the price.

DSLR Camera Lenses:

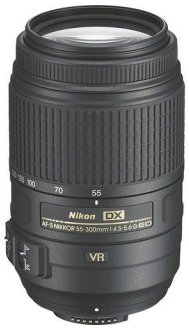
One of the biggest benefits of having a DSLR camera is the ability to swap out lenses for different uses and situations. A wide-angle zoom lens might work for taking pictures of groups of people, large structures such as homes or office buildings, or any place where you need a larger angle of view and have less space to work around in. A prime lens might work better for taking pictures of individuals or products in a controlled environment such as a studio or lightbox, while also giving you the flexibility to take it outside. While most camera packages will come with a mid-range zoom lens, I would recommend having a prime lens also for those situations where you need a shallow depth of field and a large aperture.

Large Depth of Field (everything in focus)

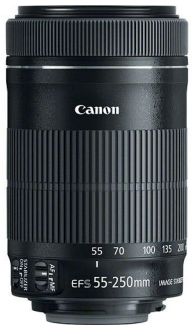
Small Depth of Field (only subject in focus)

Lenses are defined by their focal length, which is measured in millimeters. Zoom lenses have a range of focal length, such as 18mm to 55mm, where as prime lenses have a fixed focal length, such as 50mm or 35mm. Zoom lenses give you a greater range for composing shots, and in general have a wider angle (meaning you have a wider angle of vision), and prime lenses have a shallow angle and are great for macro photography and tack sharpness. There is an excellent explanation of lens types on the Digital SLR Photography blog here: http://www.digitalslrphoto.com/dslrbasics/startersguides/29089/dslr_starters_guides_lenses.html

Since most camera packages come with a zoom lens, there isn't a real need to put a recommendation for zoom lenses, but I'll do it anyway. For Nikon, the **Nikkor 55-300mm**



telephoto is an excellent rated multi-use lens for $399, and the **Canon EF-S 55-250mm f/4-5.6** for $299 is a comparable Canon option. The zoom lens will allow you to take a wider angle for situations such as large buildings or large groups of people without having to stand 200 feet away, and work wonderfully for taking shots of people while also capturing a large environment. The long zoom on the lens also allows you to take detailed pictures of subjects far away. Keep in mind though, that the aperture on the zoom lenses is smaller, so it will have some troubles in low light situations (in which case you would need to lower the shutter speed and/or raise the ISO to maintain a good exposure).



For a prime lense, the go-to choice for Nikon is the **Nikkor 50mm f/1.8** for $220, and the **EF 50mm f/1.8** at $125 for Canon. This lens is great for images that require little to no distortion (such as headshots), and images that need to be able to have a wide open aperture, perfect for macro photography with a shallow depth of field and low light situations. The Nikkor lens is also an AF-S lens, meaning it will have autofocus capabilities when attached to camera bodies that don't have their own autofocus motor. Keep in mind also that the EF-S lens distinction on the Canon 50mm means that you have to have a compatible camera body (and all the Canon camera bodies mentioned above are compatible with both EF and EF-S lenses).

While most lens packages come with one or two zoom lenses, we recommend having a prime lens in your camera bag to capture products and other macro objects. Having those two lenses will ensure that you can handle most any photo situation.

DSLR Flash: Camera flash (and quality of light in general) is a tricky subject, because using it the wrong way can generate results that are worse than if you were to not use it at all. DLSR on-camera flashes (and just about all on camera flashes) are pretty horrible when it comes to creating well lit photos. Yeah, they'll light up your subject, but at the cost of muted or washed out color, harsh shadows, and uneven light. The issue is that an

on-camera flash has no light diffusion - it's simply a full blown direct light. If you ask my advice, I would say just never use it. If that little flash pops up, just close it right back down.

Use a combination of aperture, ISO, and shutter speed to give the image sensor the amount of light it needs. If that's not enough, consider using a different environment with more available light. If you can't move, maybe a light kit that allows you to add diffused or fill light will do the trick (lighting kit recommendation below). You can also purchase better flashes, called "hotshoe" flashes that attach to the top of the camera body. Hot shoe flashes not only give a more powerful light, but they are directional so you can point it at the ceiling, a wall, or another surface to bounce the light off and diffuse it before hitting your subject. You can even buy little diffusers for hot shoe flashes to help even out the light even more. I won't go too far into hot shoe flashes because I feel like that's out of the scope of this article (and they can get pretty pricey), but if you want to learn more, Nikon flashes are here: http://www.nikonusa.com/en/Nikon-Products/Flashes/index.page and Canon flashes are here: http://shop.usa.canon.com/shop/en/catalog/speedlite-flashes

If all else fails and you're forced to use the on-camera flash, try redirecting the light to the ceiling or filtering it through something like a piece of paper to try to stop it from washing out colors and creating harsh shadows on your subject.

DSLR Accessories:

Now that you have your camera picked out, your lenses in order, and you're ready to start shooting, it's time to give some attention to the essential accessories that go into your camera bag.

A camera bag - of course right? Make sure you get one that can hold multiple lenses, the camera body, as well as memory cards, batteries, and other useful related items. It's important to make sure that the bag can safely package all your new expensive equipment, and protect them in case of a sudden drop. It's also important to get a bag that's going to be comfortable - there are many options for bags that function like a backpack and allow for lots of space and comfortable carrying. The example pictured is the Case Login Camera backpack for $92, found on bestbuy.com (at the time of this writing, it was on sale for $68).

A tripod - For those situations where you need a steadier hand for a longer shutter exposure, or a long distance zoom that causes the lens to amplify every tiny movement. Tripods deserve an article of their own; there are so many options and variations that it would take too long to list them all. From the marketer's point of view, you don't need a fancy $300 tripod, and here at

AlphaGraphics we've had plenty of success using a best buy Dynex tripod that cost $20. It's useful to pick one that has a level built in, for when you're taking a picture in a difficult location and have to make sure the shot is composed properly. The example pictured is the $20 Dynex tripod found at bestbuy.com.

Memory Cards - If you're using a DSLR with a high resolution sensor, you're going to need some hefty storage space. Luckily, memory cards are plentiful and inexpensive. Look for name brand memory cards with a speed rating of 10 or higher (called "class 10" cards), those will give you the fastest transfer speed. The actual storage space limits depend on how many photos you plan to take in one shoot, and if you plan to capture high definition video. Here at AlphaGraphics, we use an 8 gigabyte SDHC card, which can hold about 250 RAW images (more on RAW later) or 20 minutes of video. It's also important to make sure the card you buy is compatible with your camera. Most Modern DSLR cameras take SD, SDHC, and or SDXC cards. If you're worried about breaking the bank, fear not - SD cards are on sale regularly at amazon.com, sometimes up to 75% off! The SD Card pictured is the SanDisk 32gb class 10 card for $60 (at the time of this writing, it was on sale for $23).

Have some money left in your pocket? Here's some more accessories that might help you use up the rest of that budget. These aren't what would be considered essential, but for certain situations and business environments can be a lifesaver.

Lightbox - A lightbox is simply a box that has open sides upon which some sort of light-diffusing material can be attached. When you shine a light on the sides and above the lightbox, it creates an even, well-lit space, perfect for product shots such as jewelry. We at AlphaGraphics use a lightbox (with a lighting kit, more on that in a minute) to take pictures of print pieces, promotional items, and whatever else will fit into the box that needs an even light in a controlled environment.

We built our lightbox using materials lying around the shop (like a big cardboard box, some white fabric, and a heck of a lot of black duct tape), but if you need to buy the materials you can usually get what you need for under $25 (not including lighting). If you'd like step-by-step instructions, there are many sites online that have pictures and a materials list to help you along, we used the guide here: http://www.wikihow.com/Create-an-Inexpensive-Photography-Lightbox. You can also buy

lightboxes premade, but it is so much cheaper (and more fun) to build your own. To extend its use even further, here at AlphaGraphics we are building up a series of printed backgrounds and textures that fit inside the box, such as wood, concrete, metal, and more to give me some options for setting up product scenes that are more interesting than just a black or white background.

Lighting Kit: A lighting kit is getting into the realm of more advanced photography, but if you're in the business of selling and photographing products, it might be well worth your time and money. Luckily, lighting kits are available online in many different configurations for reasonable prices. What's important when shopping for lighting kits is paying attention to the customer reviews. Make sure it not only has above average reviews, but also make sure it has a lot of reviews. Avoid purchasing lighting kits that have 1 or 5 five star reviews and nothing else - those reviews may be biased, purchased, fake or spam, etc… You want to find a kit that has at least dozens of reviews, of which the majority are positive (actually, that tip would apply to ANY online shopping experience, although you probably already knew that).

A decent starter lighting kit will typically include two or three light assemblies with stands and umbrellas (or square lightbox diffusers, usually one or the other) and a carrying case. Some lighting kits even come with a "green-screen" backdrop for situations where you need to cut the subject out of it's background using photography editing software. The things to look for in addition to good reviews are build quality (are the pieces plastic or metal), and included bulbs (size, wattage, type - most come with 6500k bulbs that mimic natural sunlight). At AlphaGraphics we opted for the Flashpoint 3 Light Fluorescent Outfit with Stands, Umbrellas, Bulbs, 6" Reflector and Deluxe Case for $180 on amazon.com (pictured). We use it to light our custom-built lightbox, as well as taking pictures of our staff in front of a green screen. Once you start shopping you'll find that there are literally hundreds of choices, but they're usually minor variations of the same kit. If you're not sure which to pick, try to go for a 3-light kit and watch the reviews! When it comes to lighting kits you certainly get what you pay for so if it looks too good to be true, it probably is.

Section 2: Tips & Tricks

Now you have the equipment, and you're snapping pictures like crazy. For many marketers, it will be enough to switch the camera to "auto" or "guide" and call it good. The auto mode on a DSLR camera will admittedly be good enough in most cases, and a huge step above what previously was most likely a low resolution cellphone picture, but if you want to have absolute control over the elements of your image, manual mode is the way to go. In this next section, we'll go over recommended practice & some basic photography composition and lighting rules.

First, a recommendation for taking photos with your new DSLR:

RAW vs JPG: I cannot stress enough that you need to shoot in RAW. RAW is an image format that is available in the image quality options of DSLR cameras that allow the camera to capture many times more data that if you shoot in JPGs. When shooting with JPGs, the camera takes built-in image presets such as sharpening, color temperature, color vibrancy, etc… and then applies various additional settings and filters to new images before they're saved onto the memory card. Some involve automatic noise reduction, additional color vibrancy, distortion reduction, etc… Many of these are intended to improve the quality of the finished image, but what is essentially happening is the camera making changes to your images without your input.

When you shoot in RAW, the camera records only what the sensor sees without applying adjustments. Not only that, it records so much more light and color information compared to JPG that is makes editing much more flexible. If, for example, you take an image and it turns out to be too dark, a JPG will have very limited editing options to lighten it up. A RAW image that is too dark can easily be lightened by simply increasing its exposure in a RAW image editor. You can increase color vibrancy, adjust colors individually, and essentially just have more control over the image. Why is this important? As marketers, we know the value of being able to adjust the images we take to elicit the response we want.

There is a downside, however. Because the camera doesn't apply any adjustments to RAW images, they usually come off the camera needing a little work. You become the one controlling and improving the photo's color and tone instead of the camera. Also, because RAW images contain so much more information, their file size can be many times bigger than a jpg. Many DSLR cameras have the option to save RAW and JPG images simultaneously.

Quality of Light:
How you portray the light in your photography can have a dramatic effect on how the viewer perceives and is affected by it. For example, pictures of a warm sunny evening can often have a softer, warmer light - often with a subtle lens flare and/or light "bleed" that gives it a welcoming and soothing tone. On the other hand, photos with a cooler desaturated color palette with a

darker light and deep shadows can create a sense of mystery, foreboding, or melancholy. If you take a look at just about any instagram feed, you'll see examples (some of which are mind-meltingly overdone) of filters and other effects that change the light temperature and structure to change the image's feel.

Some of these effects are enhanced or even created from scratch via editing software programs such as Photoshop, Lightroom, or iPhoto. What is good to know, however, is you can control a lot of the light quality simply by being aware of your shooting environment. For example:

Clouds: A lot of people have the misconception that the best photos are taken on a cloudless sunny day. While that's true for someone whose goal is to capture harsh dark shadows and lots of contrast, the reality is a lot of good photography happens on the cloudy days, the overcast days, and days when clouds serve as a gigantic light diffuser for the sun. When clouds diffuse the light, they soften shadows, disperse light, and even out tones. If you have to shoot outside, wait for a cloudy day! No clouds around? Look for shade from structures such as tall buildings and trees.

Sunrise / Sunset: A well known photographer's rule, the so-named "magic hour" exists when the sun is either just about to rise or has just set. Similar to clouds diffusing light, when the sun has no direct rays on your photos (like when it has just set) it provides completely diffused light, removing harsh shadows. It also gives the light a warmer tone, perfect for skin tones and welcoming landscapes. Many photographers utilize the magic hour for portraits, family shoots, and engagements/weddings, but it can do wonders for landscapes and photos in nature too.

White Balance: There is a setting on DSLR cameras that attempts to mimic and compensate for different light types when shooting. For example, a fluorescent light in an office building puts off a different temperature than natural sunlight, which is different than yellow light bulbs. Most times it works to let the camera decide on the light temperature, but you can manually set it

before shooting to ensure the right one is used on your camera. If you shoot in RAW, this can be changed after the fact in a RAW editor, so don't worry too much about it!

Composition:
Photo composition can mean the difference between a mediocre photo and an amazing photo. Simple adjustments can help show your product or service in a more appealing light just by changing your angle of view, or giving a little more thought to the background or color. What follows is some universally accepted compositional rules to help you improve your compositions.

Rule of Thirds: The most common photography composition rule is the rule of thirds - most people who have spent any time with a camera have probably already heard of it. The idea is that if you were to take your view rectangle and split it into three equal sections both horizontally and vertically, you would end up with 9 sections. The important elements of your photo should either be placed along the dividing lines or at the intersections between two lines. This is of course not an absolute requirement for all photography (rules were meant to be broken!) but what it does is teaches you that many times a more interesting composition can be achieved by NOT putting your subject smack in the middle of your view. Many cameras have a built in "rule of thirds" overlay that you can add to the viewfinder, you'll find it in the settings menu.

Leading Lines: When looking at an image, the human eye naturally follows and makes connections between elements, both literal and implied. For example, in the landscape above, there are leading lines in the horizon, or the line of trees leading to the focus tree at the top of the hill, etc… In the boat example, the outer shape of the boat leads the eye to the top left corner. Use leading lines to guide your viewer to the important elements in the image, in addition to helping them navigate around the image. Leading lines are useful for a marketer when they are composing a "scene" for their product, and using leading lines (and the rule of thirds) allows them to guide their customer toward the focus of the product.

Patterns and Symmetry: Patterns and symmetry are two visual phenomena that are everywhere in nature - anything from the spiral pattern of leaves on a sprouting tree to the complex and beautiful hexagonal pattern of a honeycomb. The human eye is naturally drawn to and interested in patterns and symmetry, so using that to your advantage will ensure that your images always get a second look. To give a practical example, here at AlphaGraphics whenever pictures of a print piece are being taken, we always try to use multiple pieces fanned out, or stacked, or in some sort of pattern that makes it more interesting than just one piece on a table.

Background: When trying to photograph a product, in most situations the main goal will be to focus on the product right? Also, putting the product in a scene with other elements is a natural choice to make the image more interesting and appealing. The background can help guide the viewer to your product by using leadlines lines, textures or patterns - or it can be a distraction from the product and cause unnecessary confusion. When deciding what the focus will be for your image, don't make the mistake of composing too many distracting elements in the background that will cause the focus to get lost.

The Human Element: It should come as no surprise that most humans like looking at pictures of other humans. That's why a friendly face on the cover of a brochure gives it a welcoming feel, and why websites put pictures of nice looking people with headsets that say "operators are standing by!" to drive home the impression that you're important to them. When taking pictures of your products, services, and locations, consider adding a human element to make the picture feel more friendly. If you sell coffee, take pictures of a nice person holding a latte with a smile instead of the latté alone on a counter. If you sell jewelry, take pictures of rings and necklaces on real fingers and necks. Not only does it give a friendlier tone to the image, but it's also a built-in scene with natural color and warmth.

That should be enough to get you thinking about the images you're taking. These rules and guidelines exist to give you a basic understanding of "good" composition, however, they also allow you to learn when it's ok to experiment. When taking photos for the purpose of generating interest and intrigue in order to ultimately make a sale, it's in your best interest to think about and photograph your products in new and interesting ways. Use different angles, put your products into a scene, photograph them in use, crop the images to create a sense of mystery - essentially do whatever you can to make them interesting! For example, some of you might remember the "teaser" photos I took when we first got our new EFI H652 flatbed printer (learn

more about that here). To try to generate interest, I took small complex mechanical shots with a small depth of field and a close-cropped view to create a little mystery into what is a very powerful and versatile machine:

Section 3: Software and Editing

It used to be that if you didn't have Photoshop, you were relying on Microsoft Paint, or apple iphoto to manage and edit your photography. Nowadays, there are many options, both free and paid, that allow you to get a similar experience with most of the same capabilities as the big players. If you have the budget, however, Lightroom and Photoshop from Adobe are still the professional standard for image editing and organization - we recommend you use it if you can. Adobe offers a "photography" bundle in their Creative Cloud subscription model that gets you the newest version of Photoshop and Lightroom for only $120/year.

Photoshop/Lightroom: Photoshop and Lightroom are used by amateurs and professionals alike to manage and edit photography. It has a built-in RAW editor, and thousands of features and tools to get the most out of your photos. More on photoshop: http://www.adobe.com/products/photoshop.html and Lightroom: https://www.adobe.com/products/photoshop-lightroom.html?promoid=KLXLX. The downside to these professional products are the sometimes steep learning curve - they have become so full featured that getting into editing can be a little daunting. Luckily, there are thousands upon thousands of tutorials from both Adobe and hundreds of other photography and design blogs to help get you started. Here are a few:

http://www.hongkiat.com/blog/photoshop-photo-effects-part-iii/
https://helpx.adobe.com/photoshop/tutorials.html
http://www.photoshop.com/tutorials

Photoshop Express Editor: There is a free online version of Photoshop available that offers many of the same tools and abilities as it's bigger brother. Unfortunately you have to work online by uploading your images to their server, doing the editing, then downloading them again. It's best used for smaller photos for social media and other online applications, but it serves as a decent alternative to full Photoshop. Learn more here: http://www.photoshop.com/tools/

GIMP: What many people consider Photoshop's open-source counterpart, GIMP is a downloadable image editor built by a community of dedicated developers and offers many of the same features that Photoshop does. It's a free download, but beware, there is a learning curve and it's not as polished as the paid options. As of this writing, Mac OS X support is a bit of a pain but there are ways to get it installed on an Apple machine. Learn more here: http://www.gimp.org/

Pixlr: A fairly well known alternative photo editor, Pixlr has a pretty polished couple of apps available for both download and online webapp usage. There's an "express" editor that allows you to add filters, effects, and other minor adjustments, and there's a full fledged editor complete with layers and other tools that mimic full Photoshop capabilities. There are free and paid options, mainly you get more features and tools with a paid subscription. Learn more here: https://pixlr.com/

Camera RAW editors: If you're going to shoot in RAW (you really should), you're going to need a RAW editor. RAW editors allow you to adjust all those color, temperature, sharpness, and other settings using a proprietary interface. Most professionals use Lightroom, many others use Photoshop, but if you can't or do not want to purchase those programs, there are some alternatives to allow you to keep shooting in RAW:

Many DSLR cameras come with a RAW editor software, and it's actually not that bad. Nikon cameras typically come packaged with "CAPTURE NX-D", or you can download it for free from their website here: http://www.nikonusa.com/en/Nikon-Products/Product/Imaging-Software/Capture-NX-D.html

Canon has software called "Digital Photo Professional" that can be downloaded from their website here: http://www.canon.co.uk/support/camera_software/#EOSDPP

If you don't have software that came with your camera and haven't tried the Nikon or Canon option, there is a freeware RAW editor called "Raw Therapee" which boasts easy-to-use and powerful edition capabilities. You can download it on their website here: http://rawtherapee.com/ There's also a pretty comprehensive guide on how to use it here: http://www.howtogeek.com/howto/41454/how-to-process-camera-raw-without-paying-for-adobe-photoshop/

Photo Editing Terms

While the following might differ from program to program, there are some universal adjustments that will be used in many RAW image editing processes, and might be useful to learn. Most of these examples are coming from the Photoshop RAW editor, but you should find similar settings on most other editors:

Exposure: We've discussed the term exposure before, which is essentially the amount of light that gets absorbed by the camera's image sensor when the shutter button is clicked. It is affected by a combination of ISO, shutter speed, and aperture, and determines the lightness or darkness of the finished photo. When shooting in RAW, you have the ability to adjust the exposure after the fact using a slider. Be cautious about going too far with the exposure sliders though, if you bring it up too high you'll have blown out areas, which are sections that are so bright white that you lose all color information. This is why it's important to try to get a good exposure at the camera, because the RAW image editor can't bring back information that was blown out in the first place.

White Balance / Color Temperature: Typically the white balance is a dropdown selection, where you can choose from various presets such as "daylight" or "tungsten". Normally there are also sliders underneath that allow you to customize the balance to cool a photo down, or remove green or magenta color casts. This is a very visual tool if you're not into reading histograms, and it's good to have a color calibrated monitor if you want to make these kinds of adjustments. Again, subtlety is key here, don't over do it (unless that's the effect you want).

Vibrance and Saturation: Another set of color adjustments, vibrance and saturation, affect how vibrant and saturated the colors are - but in different ways. The saturation slider bumps up the color saturation in a universal way regardless of how saturated the colors already are. This can result in "clipping" of colors, meaning the saturation reaches past the point of the color gamut (the blues can't get any "bluer") and can really ruin images with skin tones. Vibrance, on the other hand is more of a smart tool, and increases the saturation of colors that are more muted without oversaturating the colors that are already spot on. In most cases, you're going to want to use vibrance if you have it available.

+100% Vibrance

+100% Saturation

Summary

I hope that this guide helps marketers take better photos, even if they can't afford a $3000 camera and professional editing software. In the current marketing climate that's filled with competition and the need for a fast paced content creation engine, it makes sense to ensure your marketing materials, in print or online, have a higher standard of quality than the rest.

If you have any questions or would like to discuss, simply comment on the bottom of this post, or catch us on facebook at https://www.facebook.com/BillingsAlphaGraphics. Thanks for reading!

Dan

Glossary of Terms:

DSLR (Digital Single Lens Reflex): A digital camera that utilizes a larger image sensor, mechanical shutter and viewfinder mirror that gives a film-like quality of photography.

Digital "Point and Shoot" camera: a digital camera that utilizes a smaller image sensor, approximate viewfinder-based capture and a smaller portable body.

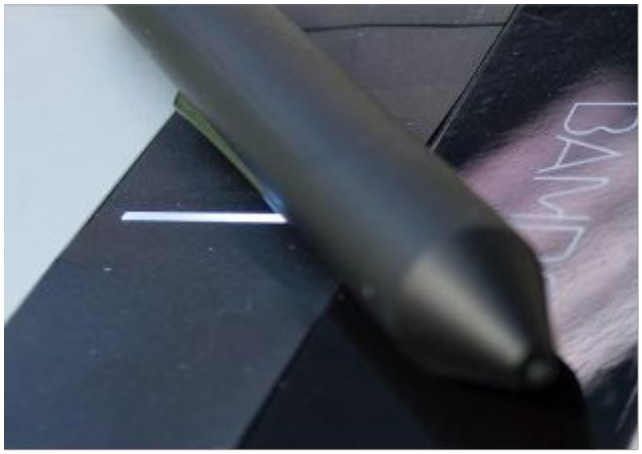
Image Sensor: the electronic board that absorbs and records light and color information onto the camera's memory card when the shutter button is pressed.

Shutter/Shutter speed: The "gateway" that allows light to enter and record information on the image sensor when the shutter button is pressed. The speed can be set on some cameras to allow more or less light in at a time. Quicker shutter speed = opens and closes the shutter faster, slower shutter speed = opens and closes the shutter slower. Shutter speed is illustrated in fractions - for example a fast shutter speed is 1/3200 or 1 3200th of a second.

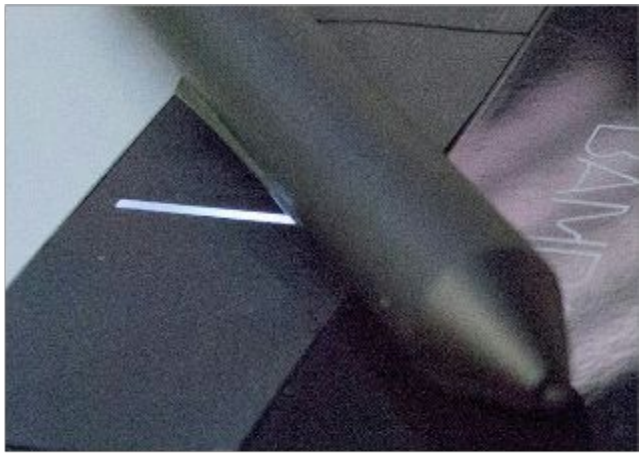
Aperture/f stop: The size of the hole that lets light into the camera body and onto the image sensor when the shutter button is pressed. The aperture works a lot like the iris of the human eye; opening and closing to let the right amount of light in. Aperture is illustrated in the following format: f/8. When dealing in aperture, the bigger the number, the smaller the aperture (because when you say f/8, you're actually saying ⅛). f/1.8 is bigger (more open) than f/11. A bigger aperture means that the depth of field will be narrow (blurry background, sharp subject). A smaller aperture means that the depth of field will be broad (sharp background, sharp subject.).

*Example of an aperture in various sizes from smallest to largest

ISO: The sensitivity to light of your image sensor. The higher the ISO, the more sensitive the image sensor is. A higher ISO setting means that the sensor will gather more data while shooting in low light environments. The downside to a high ISO is image noise.



Low ISO Image (100)



High ISO Image (6400)

*fun fact: the low ISO image takes up less memory, meaning they will create a lower file size for web applications. Why? Because noise make for a more complex image, which creates a larger file size.

Exposure: Using a balance of shutter speed, aperture, and ISO, the amount of light and information that is applied to the image sensor when the shutter is clicked. The "right" exposure is trying to get a balance of lights and darks without losing quality, sharpness, or color. The exposure of an image can change depending on the environment, atmosphere, and overall goal of the finished image.

Some examples of how to use shutter speed, aperture and ISO:

1. Let's say you're outside on a sunny day, taking pictures of fast moving objects such as running people, or moving vehicles. Your shutter speed needs to be quick to open and close, fast enough to "freeze time" for the fast moving objects while minimizing blur. The ISO could be very low, because on a sunny day the sensor doesn't need to be extra

sensitive. The aperture would most likely need to be small, to allow for everything to be in focus.

2. Let's say you're inside a florescent lit room, taking pictures of a brand new product. Your shutter speed could be slower to allow for the sensor to take in more light. The ISO might need to be a bit higher to give it more light sensitivity, and the aperture would need to be open wider to not only let in more light, but blur the background.
3. Now you're in a dimly lit room, trying to take pictures of people moving and talking. This is one of the most difficult scenarios, and most times you have to sacrifice a little image quality to minimize blurriness. Your ISO would need to be pretty high to add more light sensitivity, your shutter speed would still need to be fast so your subjects weren't blurry, and the aperture would probably have to be smaller so everything is in focus even though people are moving. If you can, try to add some light into the scene in the form of a lighting kit or bounced flash.

Shutter speed, aperture, and ISO all affect the amount of light that gets recorded on the image sensor. To balance all three is the goal for creating a perfectly exposed image in any condition.

MP (megapixels): The amount of pixels (in millions) of the saved image. The megapixels are determined by width (in pixels) multiplied by height (in pixels) divided by 1,000,000. For example, a camera that produces an image that is 4000 x 6016 pixels is a 24.1 megapixel camera ((4000 * 6016) / 1,000,000). A 24.1 megapixel camera can produce high resolution (300 dpi) prints at about 13" x 20".

White Balance: The temperature of light based on either preset settings or a camera's automatic approximation. The temperature of natural sunlight is different that the temperature of fluorescent lights, which is different than tungsten lights. You can either set the white balance in the camera's menu, or, if you shoot in RAW, adjust the white balance in a camera RAW editor