

Getting into a spin

A guide to 360° Product Photography

by the team at Swiftspin



Contents

Introduction	3
What Exactly is 360° Product Photography?	4
How is a Spin Created?	5
1. Photography	5
- Turntable	5
- Centring the product	6
- Styling	7
- Lighting	7
- The camera	8
- Number of images	8
2. Processing	9
- Retouching	9
- Colour balancing	10
3. Animation	10
- General software	11
- Bespoke software	11
The Main Feature	12
1. Interactivity	12
- Zoom	12
- Magnify	12
- Hotspots	12
- Stop frame animation	13
2. The Personal Touch	13
- Corporate identity	13
- Adding your logo	13
- Adding a background	14
The All Important Cost	15
- Costs to consider	15
- Volume discounts	16
- Licence fees	16
Information for Retailers	18
- Will it improve my sales?	18
- Advice for smaller budgets	19
- Preparing products	19
Information for Photographers	20
Summing up	21
Who are Swiftspin?	22

Introduction

You've had a miserable day. You only came out to buy a pair of jeans and now it's started to drizzle. It's the last shop. Your last chance. What are the odds of finding the perfect... and there they are, teasing you through the window.

Your nose hits the glass. The silent assistant nods her head and points at the closed sign. But you need to see them; you need to check the fit, the length, the stitching.

This is what happens every day on websites around the world. You end up basing your shopping choices on a single, flat image.

Now imagine you skipped the latte and reached the shop five minutes earlier. You have the jeans in your hand. The ultimate pair of...hang on, you're not sure about that weird red stitching on the back pocket.

And that is what 360° Product Photography gives you - the ability to inspect a product all the way around.

Repeat the above in any high street shop. The jewellers, the shoe shop, even the shop selling bicycles... whatever the product, you can take control from the comfort of your own browser. And you don't even have to pack the umbrella.

Maybe you're a retailer and you've seen it on a competitor's site. Maybe you're a photographer and want to offer the service to your clients. Maybe you're a web developer whose clients have asked about it and want to know the next step.

In this document we've decided to try and give you the facts, based on the two years experience we've had running one of the UK's leading 360° Product Photography studios.

What exactly is 360° Product Photography?

It would be much easier to put a link here and show you a sample, but we don't want this to seem like an advert. So bear with us, we're going to describe it through the power of words.

360° Product Photography is a process whereby multiple photos are taken of a product as it rotates, usually on a turntable. These photos are animated using specially written software, and uploaded onto a website. The user can simply use their mouse to control the animation speed and recreate a view of the original product spinning 360°.

There doesn't seem to be a definitive name for the file that's produced. Some call them product spins, others call them 360 spins. Some even call them 3d objects, but as you can't see over and under they're not strictly 3d. Because the images are displayed very quickly and the product appears to rotate, we call them Swiftspins. It's swift and it spins. Simple.

So, if it's so great, why isn't 360° Product Photography spreading across the web like wildfire? Why isn't every photographer offering it as a service? Why haven't you seen it plastered across discussion boards, news sites or in trade magazines? As far as we're concerned the reasons are clear... it's too new and too confusing.

Scores of companies are advertising quick and easy do-it-yourself solutions, so there is plenty of choice. Unfortunately they all seem to have different systems and services. One company might offer zoom with 24 images, another roll-over with 12 images. One system might offer up-and-over technology, another might use Java instead of Actionscript.

And there's the problem. What on earth does it all mean? If you're designing and selling shoes, you just want your product to be displayed in a way that is as clear and engaging as possible. And you also want to know if it's worth the expenditure.

How is a spin created?

Once you've bought the camera, built a turntable, set the lighting, got to grips with colour-balancing images for the web, mastered Photoshop and written your software, creating a Swiftspin is actually quite straightforward.

Seriously though, it involves three distinct stages:

Photography, Processing and Animation.

1. Photography

- **You need a lot of time and patience.** *The photography takes longer than traditional flat photography, simply because it involves more images. And remember each image needs to be lit properly - imagine the reflections in a steel watch strap.*

Many retailers we've spoken to initially think they can save money by buying the equipment and doing it themselves. Until they actually try. A shoe company told us they regretted buying a system as they wasted so much time trying to get the perfect spin.

We've got a whole team working on all aspects of the production process. So, no, it's not really something we would recommend you do simply because you have the time.

Having said that, it can still be done. If you already have a studio producing still photography then the crossover won't be as difficult.

The Turntable

- **Sofa or necklace?** *It's imperative that you have a turntable that is flexible enough for all your needs. If you sell jewellery, you'll need a small turntable with a polished surface which won't show the dust. If you sell lorry parts then you'll need one that can take the strain.*

Because we solely concentrate on Swiftspins, we have a dedicated department who constantly develop new turntables. In our studio we have ten different turntables. Skip the next paragraph if you're bored...

Two manual turntables for general products; one for jewellery; one for watches; one to shoot shoes at an angle; two hanging frames to shoot, for example, bicycles; one for supported items such as handbags; a heavy duty automated turntable for any heavy items; and the last one to eliminate shadows.

Obviously you won't need all of these, but you'll probably find that one just isn't enough. And you won't necessarily always need a turntable. What if you sell chandeliers for example? You can't sit them on a turntable and rotate them. You'll need some way of supporting them.

You can buy ready-made turntables; some come with their own software and many are automated, although we find we have more control by operating our turntables manually. If a speck of dust lands on the product, we can simply stop the process, rather difficult to do if your turntable is spinning automatically.

Flexibility is the key when it comes to 360.

Centring the Product

- **Remember the scene from Ghost?** *Have you ever tried to throw a pot and missed the centre of the potter's wheel with the clay? Very messy. Centring a product can be an art in itself.*

There's nothing worse than spinning an image and seeing it wander from one side of the screen to the other. And you can't mark the turntable centre as the product might not cover the mark.

Your camera needs to be centred as well. If either the camera or product is slightly out you will hopefully notice it on the initial spin. More than likely you'll only see it once it's animated which is really, really frustrating.

Styling the Product

- **Even walking boots need to be styled.** *360° photography is very unforgiving. If you rush ahead and shoot them without checking the laces are neat, you'll just have to do it all again.*

Is the watch face free of finger marks? Are the bra straps evenly placed on both shoulders of the model? Is the zip completely closed on the handbag pocket? That's why we find it's best to have two people shooting each product: a stylist and a photographer.

Some 360° equipment suppliers suggest that spins can be produced in a matter of minutes. This is true, but it doesn't take into consideration the set up time, the styling or any possible reshoots. After all, this is about displaying a product as clearly and cleanly as possible - it's not a race to see how quickly they can be produced. Styling should always come above speed.

Lighting

- **This item does not contain flash photography.** *Studio techniques for lighting still images cannot be used on 360° photography. You also need to adjust your lights to suit each product - it's extremely rare that you can use the same set up for different product types.*

We initially tried using flash systems. After the first twenty flashes, the stars in our eyes persuaded us to invest in continuous lighting. A good kit with the flexibility of soft boxes and reflectors will result in light that is easier to control in terms of power, diffusion and colour.

A stills photographer will spend much of their time adjusting their studio lights so that they don't reflect in the product. These look ugly and unprofessional in glassware, metalwork or glossy fashion items. In 360° photography it's nigh on impossible to eliminate every single reflection so we give each item a dummy spin to see how the light plays.

The Camera

- **Keeping it in focus.** *Obviously the choice of camera is important too. Although digital compacts are ideal for web photography, they aren't suitable for Swiftspins.*

If an automatic turntable is used, the shutter speed has to be incredibly quick otherwise the product will appear blurred. Most digital SLR cameras have manual settings allowing you to adjust shutter speed and aperture.

There's no point spending a few thousand on a camera with hundreds of features that are never going to be used. Having said that, we don't like to scrimp on lenses. The better the lens the sharper the image. A cheap lens is like putting nylon strings on a steel strung guitar. It does the job but the quality will be missing.

How many images make a rotation?

- **The million dollar question.** *Like the proverbial piece of string, this varies from supplier to supplier. Some suggest that the fewer images you use the better. This is fine if you want 'own brand' rather than 'premium'.*

If you can easily count the number of images in a spin then it will probably contain 24 or less. 18 images are quicker to shoot, quicker to download and quicker to view on screen, but the difference will show when compared to higher quality spins.

Early on in our development we tested every combination from 12 images to 90. We found that 72 images gave the smoothest animation from our software. Some would argue this is too many but it gives us the option to remove half of them and make a 36 image rotation if necessary.

Once the turntable is set up, it doesn't take any longer to shoot 72 images than it does 36, so cost is not a factor. In fact most of our clients use 36 and are completely happy with the speed and quality.

We refuse to go below 36 images as the spin becomes jerky. Please bear this in mind when researching your 360° suppliers.

2. Processing

- **Calling all Photoshop wizards.** *You've bought the best camera and lights but the captured images don't look exactly the way you want them to. Don't worry, this is a common problem.*

Maybe the gorgeous blue sheen on your jewellery now has a tint of yellow; maybe you had to tie up a handbag to show the strap and now need to get rid of the support; and why does that background shadow have a ghostly flicker? Actually, keep an eye out for this, it's a common problem in 360°.

From our experience, and judging by most of the photography forums we've been on, there's not a single camera in the world that captures exactly what your eye can see. But don't despair, all is not lost...

Retouching the Image

- **Hold on.** *There are 72 images! Surely you haven't got to retouch each image? What about the suppliers who claim their images don't need retouching and can be uploaded straight to the web?*

Unfortunately, some things like scratches or dust will need to be retouched on each individual image to get it looking exactly as the product. This is where a little extra time and patience in the photography stage pays off.

If you're producing your own 360° spins you'll need to inspect and retouch the images in processing software such as Photoshop. If you don't know the ins and outs of Photoshop, it's time to go back to school. Layers, levels, healing, saturation, nearly every Photoshop tool will be required at some stage.

Photoshop is also brilliant for cropping images to the required size. Cameras usually shoot at 6x4 proportion, which doesn't help if you want your final rotation to be square.

Colour Balancing

- **How's your temperature?** *If you look at a product in the morning it will appear bluer because the colour temperature is cool. As the temperature rises throughout the day the product appears more orange. Weird.*

To achieve the best results your equipment needs to be colour-balanced to a specific colour temperature. If you shoot with a flash under tungsten lights, use a fluorescent monitor setting and check it by daylight, your image will come out completely the wrong colour.

Light bulbs are produced at different temperatures, dependent on their use. To ensure complete consistency, the same lights should be used for both shooting the product and checking it at the colouring stage. The camera also needs to be adjusted to accurately balance colours. To complete the set, your monitor needs to be in tune with all the rest.

It's also important to remember that your customers' monitor may not be set the same as yours. You shouldn't be held responsible for a product being returned for looking the wrong colour just because their monitor is set to the wrong colour temperature.

It's worth adding a small disclaimer somewhere on your site along the lines of "Colours are subject to the production process and may not appear accurately on your monitor". We always encourage clients to check with their legal department to help with the appropriate terminology.

3. Animation

- **Are you and your Swiftspin compatible?** *So your retouched images are now ready to be animated into a 360° spin. The most important element when it comes to animation software is whether the file is compatible with your website.*

There are lots of different options here. Do you want to be able to zoom in to see detail? Do you want to use your files in Powerpoint or video editing software for presentations? Decisions, decisions...

Choosing Software

- **No Flash in the pan.** *The most favoured software is created in Flash by Adobe. Most web browsers can read Flash files which can then be programmed to include a host of features including zooms.*

These added features can work wonders on your spin. The downside is they take up valuable file space and can slow up download time, but we'll explain more about them later.

Adobe Flash will work on most browsers but the way the file is created for a 360° rotation may differ and cause problems. Some software collects images from an external server in order to speed up loading times. Sure it's quicker but can cause problems with content management systems (CMS) as in most cases the directory structures need changing. This creates a lot more work for the web designer.

We find it best to have a single, self-contained Flash file, which can be uploaded the same as a normal still photograph. This won't cause problems for your CMS and you keep control of the files without having to rely on a separate server which could go down at any time and lose your images.

You need to be wary when choosing software. Some companies charge you a license fee every time you use it rather than a one-off charge. We avoid using software that uses xml files to import images. There's nothing wrong with xml, but we don't find it as easy to use or efficient as our own self-contained software. Which neatly brings us on to...

Our Bespoke Software

- **Staying ahead or playing catch up?** *We developed our own software simply because we couldn't find another company who could produce the type of 360° product spins to our standard.*

We employ a full-time development team who continually work to improve our software and add more features as necessary. Of course, there are lots of software developers out there who could write a program for you but bear in mind that you will need to keep developing it.

Remember that 360° Product Photography is still in its infancy. Who knows what consumers will demand tomorrow?

The Main Feature

1. Interactivity

- **It's in the detail.** *You've probably seen websites where you can zoom in on a still image to see the most intricate detail. 360° photography can offer much more than this simple technology.*

Some suppliers don't offer interactive features because it takes quite a bit more programming, but they add so much more to a spin that it would be ill-advised to ignore them.

Zoom

By far the most requested feature of them all. You need to decide early on whether you need a full zoom, single zoom or no zoom at all. If a product is large enough on screen you won't need a zoom because the detail will be clear enough.

When you click on a zoom button, a larger version of the image is loaded in exactly the same place. You're actually now viewing it at its normal size. You can't just blow up the small image because it will pixelate badly and look like it's made out of Lego blocks.

The downside is, because the image is so large, it will take up more storage space and be slower to download. If you have a zoom facility on every image in a rotation, it will therefore have an effect on load speed. There will always be a pay off between file size and download speed so this needs to be carefully considered.

Magnify

This is where a magnifying glass image can be hovered over the image to show the detail. Magnify has a more delicate feel to the interaction making it ideal for clothing and other fashion items.

Hotspots

Single images are used to show unseen parts of the product, for example the inside of a handbag or the sole of a shoe. Much more cost-effective than shooting a product in complete 3D.

Stop frame animation

This can bring a whole new dimension to 360°. As you know, Swiftspins are a series of images, displayed one after the other. This means that you could, in theory, display any series of images using the same software, as long as they have a seamless join.

An example of an animation feature within a spin could be someone opening a jacket to show the fancy lining. As long as they start and finish the movement in the same place they don't have to spin around. It's pretty tricky to do but can look very effective.

2. The Personal Touch

- **Keeping it corporate.** *360° product photography, like traditional still photography, should be part of your overall corporate image.*

Many 360° software packages look the same. You may have seen some large retail sites who have obviously bought the same package as the buttons and loading bars all look similar. Try to avoid simple software that doesn't make you stand out from the crowd.

But what if you want your buttons to be bright pink and all the wording in zapf chancery bold? Of course it can be done, but to prevent a call from the taste police, we'd probably advise you to stick with your own corporate identity!

- **Adding your logo.** *It's a good idea to add your logo as a watermark so that competitors can't use your images. An alternative is to have it discreetly placed in one corner.*

All suppliers should be able to offer this facility but may charge a set-up fee or a small charge per rotation. This shouldn't be much as it's quite simple to program. However, we've heard of some suppliers who put their own logos on your spins and charge you to take them off!

• **Adding a background.** *If your website is designed on a black background, it seems a good idea to display your products on a black background too. If you're thinking of buying 360° equipment, check that it's capable of doing this otherwise you're going to spend days painstakingly cutting out your images in Photoshop.*

Of course, then you have the option of changing the colours whenever you choose. Perhaps a jolly red at Christmas time or for those a little more adventurous, drop in a photograph. If you produce surfwear, you could have that elusive breaker behind your spinning shorts!

There are a lot of features currently being created by 360° software developers to help you see the product in more detail. This is what 360° product photography is all about. Make sure you are given the choice, you don't want to be left behind.

The All Important Cost

- **Cut to the chase.** *This is always one of the first questions we're asked. Unfortunately, it's the one where we can't give a definitive answer as there are so many variants.*

A shoe takes less time to set up than a hanging bicycle and less time to process in Photoshop. A spin of a toy soldier is obviously cheaper to produce than a live model as they don't need hair, make-up and styling. As we've described above, Swiftspins can be produced in a number of different formats and features which all vary in price as well.

We are not trying to dodge the question so here's a 'ballpark' figure. Let's take the example of a standard 360° spin of a shoe. Once you have provided a full brief, the supplier should give you a cost which includes photography, processing, colour-balancing, animation and liaison with your web designers to ensure they are the correct format for your website.

Our average price per product for this type of Swiftspin, as of December 2009, is £20. This is only based on our prices, different suppliers will quote different prices.

Hopefully the information we've given will help you understand why prices vary so much, and will help you tell the difference between the products on offer.

Costs to consider

- **The hidden extras.** *We think 360° photography should be charged as an 'all-in' set fee. The only extra cost should be getting your products to and from the photographer's studio.*

We've heard of a number of extras being charged by other suppliers after an original quote has been agreed. These include charges for high resolution print images; charges to send the file to you after it's been animated; and charges for hosting your images on their servers, which we don't do as we feel you should keep complete control of your images.

Any Discounts on Volume?

- **360° photography is like a production line.** *If you shoot a shoe, a handbag, and then a lawnmower, there will be a lot of time spent setting up. Therefore, products in volume are preferred and are often charged as such.*

Having said that, our system has been developed to produce Swiftspins in the quickest and most cost-effective way. Our streamlined production system means it takes exactly the same amount of time to shoot each shoe regardless of how many we are sent.

Larger retailers appreciate discounts for larger quantities. We offer a reduction based on the number of products sent in to us as one batch. As this didn't seem fair to smaller retailers, we have also devised a referral scheme whereby retailers with very small product ranges can earn the same discounts as the 'big boys' by referring new clients to us.

Licensing and Copyright Charges

- **Pay attention at the back.** *Photographic copyright is a hugely complex subject and 360° product photography is no different. In simple terms, when a photographer takes a picture they own the copyright, even if it's been paid for by the client.*

If the photographer gave away the copyright, the client could then sell the image to whoever they wanted and the photographer would miss out on future commission. People argue that if they've paid for the image they should be allowed to do whatever they want with it, including profit from it. Sadly, that's not allowed.

Some photographers charge each time their images are used in a different media to which it was initially commissioned. So if you commissioned a photograph for a brochure cover and wanted to use it in a press advert, you'd have to pay the photographer a licence fee.

So how come photography is classed as a copyrightable art, whereas something like furniture making isn't? Imagine buying a table and being told that you could use it in the dining room but there would be a charge every time you used it in the kitchen. How is a photograph different from a table? To be honest, we don't know.

If you are using 360° spins to promote your product on your website, you shouldn't be charged a copyright fee. You won't generally be allowed to sell them or give them away but if you want another party to use them on their website, suppliers will usually provide another version for a small fee. They probably will need reformatting anyway so there would be extra work involved.

Many 360° suppliers have their own software so there is no fee for using it. Some use software from other companies and charge a small licence fee. It's certainly something to consider if you have a lot of products, as the fees can quickly mount up.

I'm a retailer, what can it do for me?

Will It Improve My Sales?

- **We would absolutely love to say yes!** *Whatever anyone says, 360° Product Photography is still in its infancy and there's been little official research done to prove the effect on sales.*

It seems like every day we receive emails from retailers eager to know the answer. What percentage of web visitors remain on a site which has Swiftspins? Can we guarantee that they are more cost-effective than still photography?

Few of our clients have been using Swiftspins long enough to properly evaluate the figures, and we're not going to make them up. All we can say is there are a number of factors which help to prove that 360° product photography increases sales. We'll list them here and let you make up your own mind.

- *The majority of our clients, once Swiftspins are running on their websites, keep coming back for more. Successful businesses don't tend to continually invest in things that don't work. Repeat business tells us that they must be working.*
- *Some of the UK's largest on-line retailers already use 360° product spins. You just need to Google the large shoe retailers for proof.*
- *A large number of huge online retailers have contacted us saying they will implement 360° on their sites. This won't be immediate, but plans are in place and have been agreed at senior level.*
- *A few retailers who don't have 360° use feedback software on their websites to gauge customer opinion. They tell us that 360° is very high on the list of suggested improvements.*

There are probably hundreds of websites in the world using 360° Product Photography and many consumers are familiar with the concept. The flip side is there are also millions who aren't using it or don't understand it. Perhaps they are waiting for a survey confirming it's the best thing since sliced bread. Or perhaps they are waiting for their competitors to take the plunge first...

We're a Small Company with a Small Budget

- **How much?** *We are delighted with people's responses when we explain it's not that much more expensive than traditional photography. And don't forget, you don't have to produce spins of your whole product range in one go.*

It's true that huge retailers have the marketing budgets to exploit new technologies before the smaller ones and that has been the case with 360° product photography. If you don't have a large budget you can still benefit from displaying your products in 360°.

For instance, some smaller retailers only use 360° for their home page in order to draw in customers and then photograph their whole range when budgets allow.

Others start by introducing them for the higher priced, best selling or new products, and then upgrade the rest at a later date. This way you can gauge the interest, check the effect on sales, and survey customers on their thoughts.

How Do I Prepare My Products For Photography?

- **Properly prepared products save money.** *The better the condition when it arrives at the studio, the easier it is to set up and shoot. Saving time in the processing stage will ultimately save you money.*

If you are sending products to be photographed rather than doing the photography yourself, remember to prepare them. Tie up the laces on shoes, put stuffing into handbags, remove the labels from garments. All these things will delay the photographer and will appear on your final bill.

The majority of our clients send us their products in bubble wrap and packaged in cardboard boxes. We'd like to say a big thank you to our clients, as this makes our job much easier and keeps our prices down.

Sometimes it's not possible to get hold of a perfect sample as a prototype might only be available. If you let the photographer know in advance they can budget for any extra retouching. For instance you may want your laptop or mobile phone to display a specific screen shot. This would need to be Photoshopped in at the processing stage.

You also need to tell the photographer how you want your product positioned. If it's a shoe, do you want a left shoe, a right shoe or both? The supplier will also need some technical details from your web designer. Our animation team usually liaises with them so you don't have to be involved if you don't want to. Web designers seem to speak their own language anyway so it's best to leave them to the technical bits.

I'm a photographer, what can it do for me?

- **Keeping it in-house.** *We offer a simple animation service to those who wish to only take the photos. This means photographers and studios from all over the world can concentrate on producing brilliant images which they can send to us for animating.*

We supply training and manuals to photographers who want to send us their images for animation so everything from set-ups to cropping can be done as efficiently as possible.

Our software has been written in a way that makes it difficult to package up and sell to retailers and photographers in order to produce their own spins. We felt that photographers' skills were being eroded by new technology anyway without them having to become 'Jacks of all trades' by doing animation as well.

Saying that, 360° and still photography are similar but require a different set of skills. It's not a good idea to approach a 360° photographer if you only want still shots for print as the lighting system is completely different: stills use flash, 360° uses continuous. Retouching may also need to be done as print is not as forgiving as the web when it comes to quality.

Although it may seem you get two shoots for the price of one, a 360° and still, if you want stills, go to a photographer who specialises in still photography.

Summing Up

The thing to remember about this document is that it isn't set in stone. It's not intended to push you down any particular route with regard to 360° product photography. As technology is developing so swiftly, it could well be out of date by the time you read it!

We totally understand that other 360° suppliers will have different ideas to those we've outlined here. We wrote it for website owners, photographers and ecommerce managers out there who have heard about 360° and just wanted to know a little more.

Hopefully we've done that and have helped you understand the basics of what is a fast growing technology. We believe 360° product photography will benefit the display of products on websites for years to come.

Who are Swiftspin?

Swiftspin are one of the longest established 360° product photography specialists in the UK. Their 'Swiftspins' are being used by retailers large and small to display their products all over the world.

The Swiftspin website contains a host of news, samples and further information about 360° product photography.

<http://www.swiftspin.co.uk>

On top of that, the Swiftspin team are passionate about what they do and love helping retailers implement 360 onto their websites, so if you have any questions why not drop them an email?

info@swiftspin.co.uk