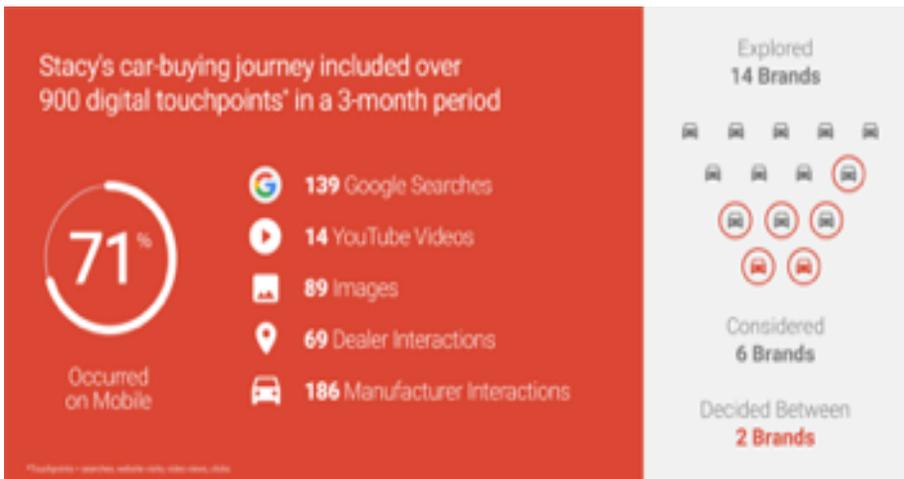**Introduction**

It is a common consensus that online merchandising of a product is essential to catching the online shopper's attention (Cars, 2020, p. 24-38). There exists plenty of insight on picture quality, pricing, special features, reviews, and product description (Cars, 2020, p.24-38); however, there is not a great deal of research concerning the order in which the photos of the product are presented. One sector with some information available on the order in which pictures should be presented is the automotive industry (Cars, 2020, p.24-30). Before getting into more details on the photo order, it is essential to understand the online shopper journey.

In 2016 Google took the initiative to follow one woman, Stacey, on her journey to purchase a vehicle (Gevelber, 2016, p. 6). Over three months, Stacey tallied up 900 digital interactions; eighty-nine of her interactions were with images (Gevelber, 2016, p. 6 - 9). This number of interactions was the third-highest following behind 186 manufacturer interactions and 139 Google searches (Gevelber, 2016, p. 9). She also accumulated sixty-nine dealer interactions and fourteen YouTube video views (Gevelber, 2016, p. 9). 71% of her inactions were conducted on her mobile device (Gevelber, 2016, p. 9). She explored fourteen brands, considered six, and decided between two (Gevelber, 2016, p. 9).

Source: Gevelber, L. (2016).
The Car-Buying Process: One Consumer's 900+ Digital Interactions. Google

The stages Stacy went through in her journey consist of "which, right, afford, where, and deal" (Gevelber, 2016, p. 4). While these shopper moments were developed for a car shopper's journey, they can easily be transferred to other shopper journeys. The "which" moment is comparing the products—in this case, vehicles—and brands to determine which one to purchase (Gevelber, 2016, p. 11). The next step is the "is-this-right" moment. This is where the consumer checklist of specific features or needs the product needs to accommodate (Gevelber, 2016, p. 12). Enter sticker shock, which triggers the "wait, can I afford this" part of the journey. Next, the consumer starts to look practically at their finances to determine if the product is currently in the cards for them financially (Gevelber, 2016, p. 13). Once the logistics of finances are out of the way, where to buy the product becomes the question (Gevelber, 2016, p. 13). Brand and reviews are essential for this stage of the process since deciding where to buy are generally based on those criteria (Cars, 2020, p. 33-40). The last step of the shopper journey or the final "moment" a

shopper has boiled down to price (Gevelber, 2016, p. 14). A pricing strategy for any product is essential (Cars, 2020, p. 25). If the product falls within the popular price point compared to its competitors, then the product will not get filtered out of the price filter search, and the consumer will be under the impression that they are getting a deal or that the price is fair (Cars, 2020, p.25).

Which-car-is-best	Is-it-right-for-me	Can-I-afford-it	Where-should-I-buy-it	Am-I-getting-a-deal
moments	moments	moments	moments	moments

Source: Gevelber, L. (2016). The Car-Buying Process: One Consumer's 900+ Digital Interactions. Google

Another topic to consider, photos are they even relevant to consumers and their shopper journey? The phrase "a picture is worth a thousand words" holds in the sense that photos elicit an emotional response (Scott & Vargas, 2007, p. 353). Videos, images, and illustrations are all visual data that is easier for consumers to understand and process (Do, 2018, p. 47). Information is 65% more likely to be recalled if the accompanying text contains an image (Gigante, 2019, p. 5). Textual information, followed by background color, composition, focal element, and props, are the in order in which consumers prefer to engage with the photos they encounter (Do, 2018, p.48). These elements help consumers visualize the product in their home or within their possession when viewing it online (Do, 2018, p. 47). Visual marketing has become increasingly important now that most shopping is done online (Do, 2018, p. 47). With the pandemic, people are shopping online even more due to the safety precautions built into this way of shopping. SEO patterns seen on websites are proving this (Cars, 2020, p. 6).

DEALER INSPIRE CLIENTS
SEO Results May 2020 Compared To April 2020

CONTINUED DI SEO	+10% Organic Traffic	+114% Organic Conversions
PAUSED DI SEO	+2.5% Organic Traffic	+51% Organic Conversions

Source: Cars.com. (2020). Staying on Top of Search.

Not only is having images important, but the quality of images is something to consider. The quality of the product image plays a significant role in selecting the product according to 67% of consumers (Gigante, 2019, p. 38). Stock photos are not recommended when featuring a product since they will not stand out to consumers (Gigante, 2019, p. 12). High-quality visuals allow the consumer to get a good picture of how the product looks, thus enabling them to visualize the product in their environment (Nicolaides, 2018, p. 1). Something as simple as a high-quality image can lead to a sale if it creates enough emotional response in the consumer (Nicolaides, 2018, p.1).

This then begs the question: what are people's eyes drawn to when they are online shopping? It is a common assumption that faces answer this question; however, this is not exactly the case (Ferro, 2018, p. 4). It was discovered that large text within the photo and a search bar draw more attention than faces (Ferro, 2018, p. 4). Another thing to consider is that branding isn't always where the eye roams; in fact, it often gets ignored for what the consumer may view as more valuable information to their product search (Ferro, 2018, p. 7). The business insider did an eye-tracking article with a few advertisements for some quick insights. With things like the New York Times and Facebook, images won out as the main point of focus (Lubin, 2014, p. 15 & 22). There was also an equal amount of value placed on the product image and face in numerous images (Lubin, 2014, p. 16 - 19). So, while faces may not be where the consumer looks first, they still notice them (Lubin, 2014, p. 16-19).


Source: Business Insider (2014, July 22). 29 Eye-Tracking Heatmaps Reveal Where People Look.

Having established that images are an essential aspect of the consumer journey, it begs the question does photo order matter for the product? Based on the eye-tracking studies done to capture where a consumer looks, it appears as if it might. Also, reviewing the information about the importance of images and the quality of images indicates that photo order would also be necessary to the consumer's shopping experience. Therefore, this study focuses on that exact question, does photo order matter to the online consumer?

Method

For this experiment, eye-tracking technology will track the participants' gaze to determine three things: what catches their attend first, what do they spend the most time looking at, and there are any skipped over. Galvanic skin response (GSR) technology will be used in addition to the eye tracking technology in order to sense the arousal level of the participants upon the first impression of the images. This will be used in order to determine what image created the eye-tracking if arousal level decreased in the participants as more photos were viewed, and if viewed, it will be compared in order to determine if there are any parallels or overlaps between the two technologies' data to pick the best picture order—or if the order even mattered at all.

That will consist of sessions with individuals of all ages, races, locations, and backgrounds. Each participant will have an appointment to receive a GSR before the scheduled day and time. The eye-tracking will be done through their webcam. All of the data will be collected remotely. The participants will be asked to go into a room without distraction where they can close the door and dim the lights. They will then be sent a link to the mock product listings with multiple photos to have them flip through. The order of the products' images will vary to help determine which photo order is most desirable. There will be five separate listings of different products. As they engage with the photos, the data will be pulled. A short survey will trigger the participant to fill out at the end of each listing, followed by a brief five-minute break to get up, walk around, and stretch. After the participant has viewed ten mock product page listings, the session will end, and the link will expire.
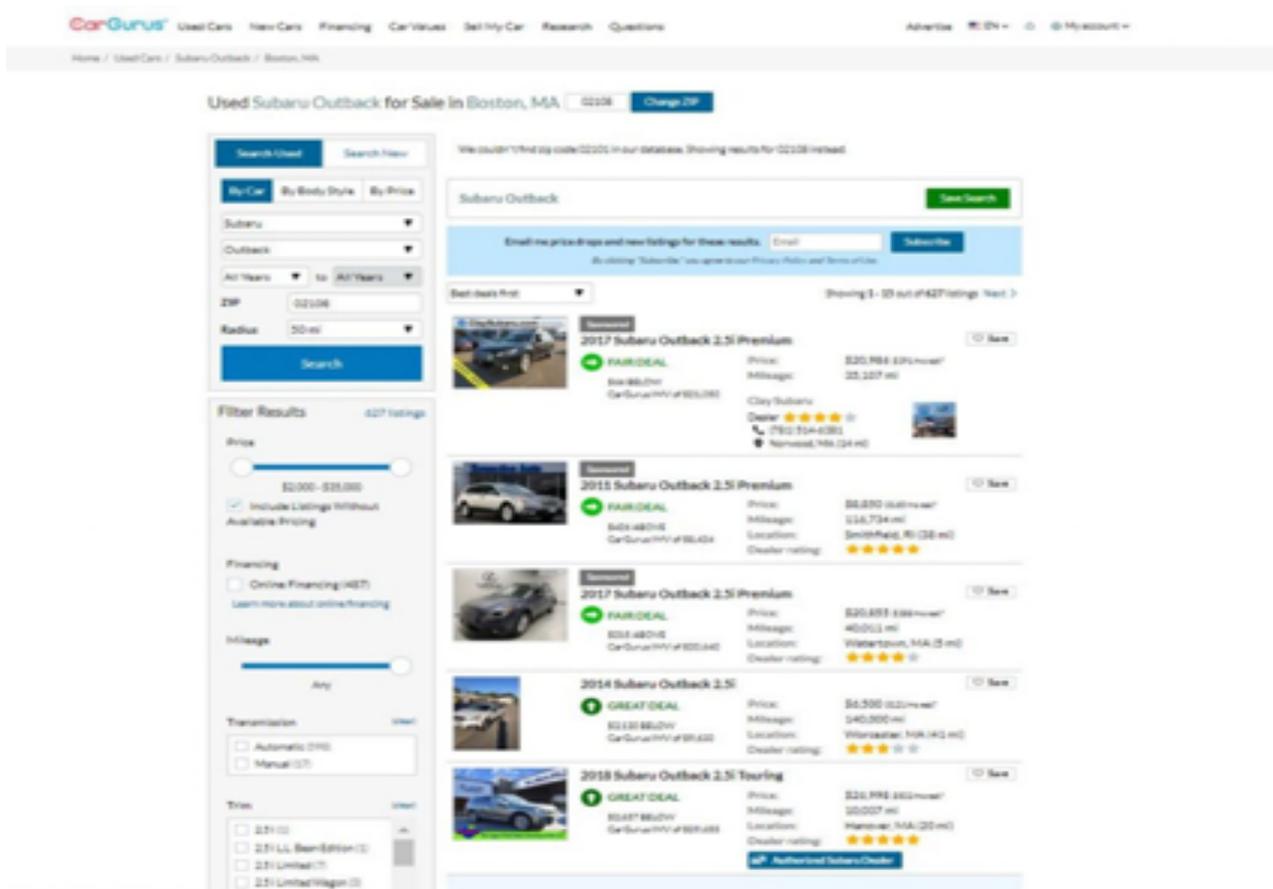
Source: iSeeCars. 10 Best Used Car Websites. https://www.iseecars.com/articles/10-best-used-car-websites

The first grouping of listings will be that of high-end spin bikes, such as the Peloton. There will be ten different bikes with twelve pictures to flip through for each cycle. The next grouping will often be other sedans from various manufacturers in which there will be twenty-five photos for each vehicle. Another grouping will be that often diamond rings, each will have five pictures for the participants to view. Lamps will be the focus of the other grouping.

There will be ten different lamps of similar aesthetic with three photos of each lamp. Finally, ten up-for-adoption kittens of similar coloring will be given to another group with six shots to engage with for each animal.

Hypothetical Results

The results of this experiment that are expected based on the research previously stated in the introduction are that overall photo order will matter. The following photos will generate the most arousal; the longest time spent looking at them. It will catch the attention first for each photo are as follows: A full view of the spin back on a diagonal facing to the right, a full view of the sedan on a diagonal facing to the right, a full, closer in, full-on view of the diamond ring, a full-on, centered view of the lamp, and a centered view of the kitten's face. The next photo that will fit those results for each category are as follows: A view of the control panel of the spin bike, a statement of any damage on the sedans, a diagonal view of the diamond ring, a picture of the lamp without the lampshade, and a photo that features the kitten's personality.

Source: XYZ Detroit News. July 17, 2019.
https://www.wxyz.com/news/michigan-animal-rescue-league-has-plenty-of-kittens

The products with fewer photos will trigger less of a decline in arousal and skipping over of images. The products with more pictures to view of the same type will have skipped over, and the arousal will decrease with each photo unless an interesting photo appears that reignites the participant's arousal. In addition, the order in which the pictures of the product are presented will determine higher arousal rates and more time spent with that particular photo grouping of the product by the participants.

The order of the photos will be of importance to the participants, thus establishing that the order of the images is relevant to online shoppers. This will make it essential for retailers to

focus not only on the quality and contrast of their photos but also on the order in which they present them.

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