

Amplifying Restaurant Profiles With 360 Photos

Carl Corry
Syracuse University
ICC613 -- Emerging Media Platforms
Prof. Dan Pacheco
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Field Test Hypothesis

As media companies from the New York Times with its [Daily 360 videos](#) to USA Today with its recent [ride in a Blue Angels plane](#), the use of 360 photos and video is become more commonplace or visually stunning stories. I sought to test whether the technology -- combined with an annotation program -- could also enhance the storytelling experience of restaurant profiles that I often write and edit, or if readers accustomed to straight text would find them an annoyance.

The idea was to not only wow people with an immersive photographic experience that would give them a sense of what the restaurant looked like from different vantage points in a way that hadn't been done before, but also provide details that added value to the story. That could include bits of information, photos, or even audio and video (I did not include the latter two).

Target Audience

The target audience was a broad spectrum of people in any adult age group who frequent restaurants and read features and/or reviews to decide whether to eat at a venue.

The Technology And Its Applicability To Media

As previously stated, 360 cameras are increasingly being used by media companies. Pointing in part to the New York Times initiative



“to create a series of VR films and distribute 1 million Google Cardboard headsets to loyal subscribers,” Nick Newman, a research associate for the Reuters Institute for the Study of Journalism who put together the report, “Media, Journalism and Technology Predictions 2016,” suggested in his introduction to expect an “explosion” of 360-degree video.

And the usage of 360 cameras will only grow as they become more ubiquitous, cheaper and easier to use.

I chose the Samsung Gear 360 because it was highly rated on numerous camera bulletin boards and shopping sites, and it is what that New York Times is using for its Daily 360 project. The camera is equipped with two 180-degree, 30-megapixel lenses and is splash- and dust-resistant. You may opt to use only one lens, either the front or rear, or both at the same time for the full 360-degree experience.

Since the camera is generally around \$360, not including a separate micro memory card, I attempted to contact Samsung directly seeking a student loaner. I did not get a response. Then I sent out a Help-A-Reporter-Out query to see if anyone for the proper credit in a loaner scenario, as well. No luck there, either. The owner of a camera company that my magazine works with responded to my call, but only to tell me the company doesn’t carry 360 cameras -- so even if I was up for using another brand, I couldn’t.

I would up buying the camera on Cyber Monday for \$325 (plus tax) and got the micro card the day after the camera came.

File under ‘read the fine print’

One thing I notice immediately that I passed up in the excitement to acquire what I was sure was the best equipment for the project: the camera’s supported app -- which allows you to

see the photos in real time so that you can properly direct the lenses (there is no viewfinder), as well as adjust many settings on the camera with ease -- was designed for the Galaxy 6 and 7. I have an iPhone 6s.

I spent hours searching for a workaround that would be compatible with my iPhone, but there is nothing available currently.

I even tried using my wife's two-year-old LG Android, but it was not compatible with the app. So I spent a lot of time testing the settings manually. That included making sure the photos were as high as resolution as possible and expanding the timer from 2 to 10 seconds so that I could get out of the shot in time. I was unintentionally in every shot with the default timer set.



Testing the camera at home before the field test. Images of the Samsung Gear 360's two lenses are shown.

Then I was unclear about the stitching process. Did it happen automatically? Via YouTube if I uploaded video? The photos seem to download fine, but the videos just came up

black. Samsung's user guide suggested that my micro card might not be fast enough, so I returned the old one and got a juiced up version that holds up to 64 GB of memory. Another \$40.

In an email, Prof. Pacheco explained that the stitching needed to be done on a Windows computer using the Gear 360 Action Director program (a separate download). The install code came inside the Gear 360 box, which I took a photo of just in case I lost it (another YouTube user suggestion, though they didn't mention the program).

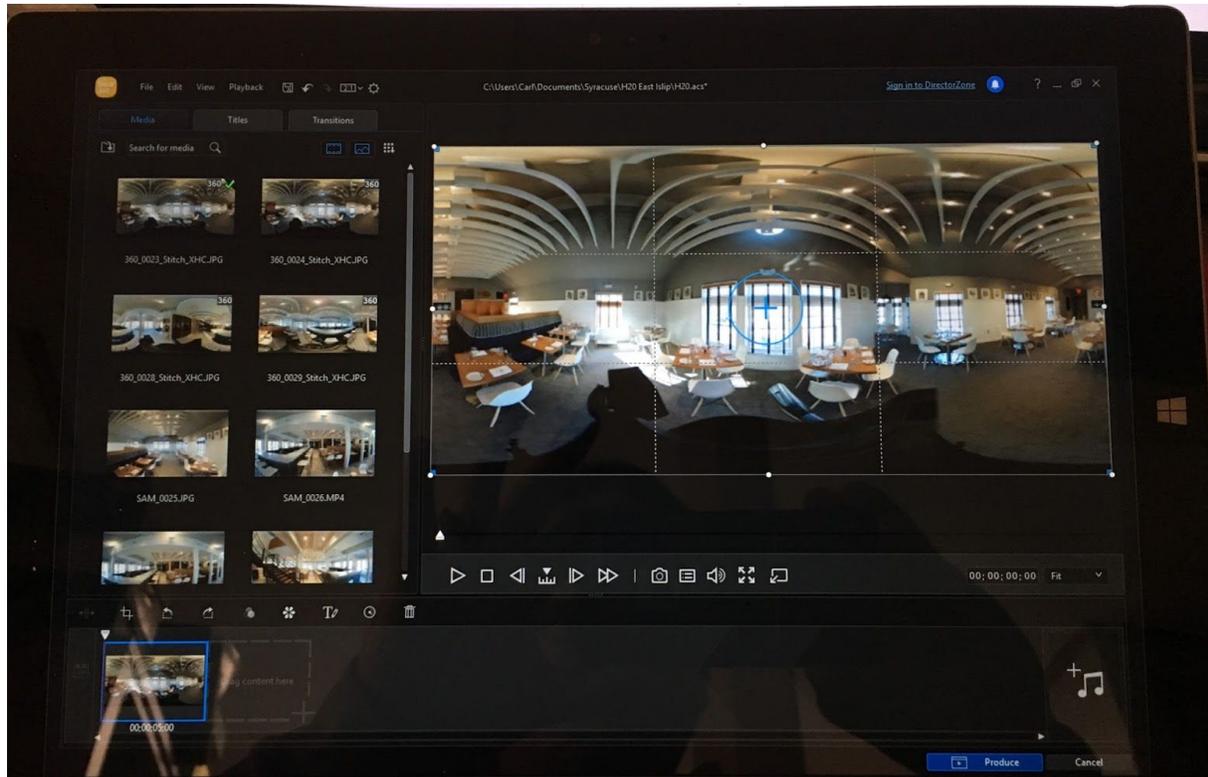
A day before the field test, I downloaded the program and imported some of my test videos and photos. At first, things were going well. Everything was stitching properly -- until I decided to move two of the photos out media gallery and suddenly it stopped working. I got a prompt to download a program called OpenGL 2.1 and I couldn't go any further. OK... So I looked for that program and mostly ran into spam. It turns out that it's an outdated program that I couldn't install. I went so far as to uninstall and reinstall Action Director, figuring I may have unintentionally messed up something, and maybe OpenGL 2.1 would come packaged inside it again. No luck.

Gear 360 Action Director

In the middle of the night I woke up and decided to install the program onto my SurfacePro3. For whatever reason, it worked fine. I was able to stitch a bunch a photos and short videos.

It's here when I decided to only do photos for the field test, and not include video, in part because I learned videos would take a lot longer to process and that the Action Director program wasn't a good editor. I hadn't tried using 360 videos in Premiere Pro, and with my field test early

the next day, I wanted to leave as little to chance as possible. I also had plenty planned with the photos and only had about two hours for the photo shoot.



Gear 360 Action Director automatically stitches photos and videos together.

The Field Test

I had considered several scenic restaurants with good lighting for the setting of my field test, but chose to go with a new H2O Seafood & Sushi-East Islip, which I had learned would be opening in the coming days. This would not only be a good opportunity to write about the restaurant's opening, but I liked the sneak-peek factor to attract readers.

At H2O Seafood & Sushi on Dec. 10, I started by taking some regular photos with my DSLR of the restaurant, which was still in final stages of renovation, but plenty good to shoot. I

then used the Gear 360 and took multiple photos in six locations -- four in 360 and two in 180 to see how both perspectives would show up in my eventual presentation using Viar360.com. That online program groups together 360 photos and videos and enables certain annotation features.

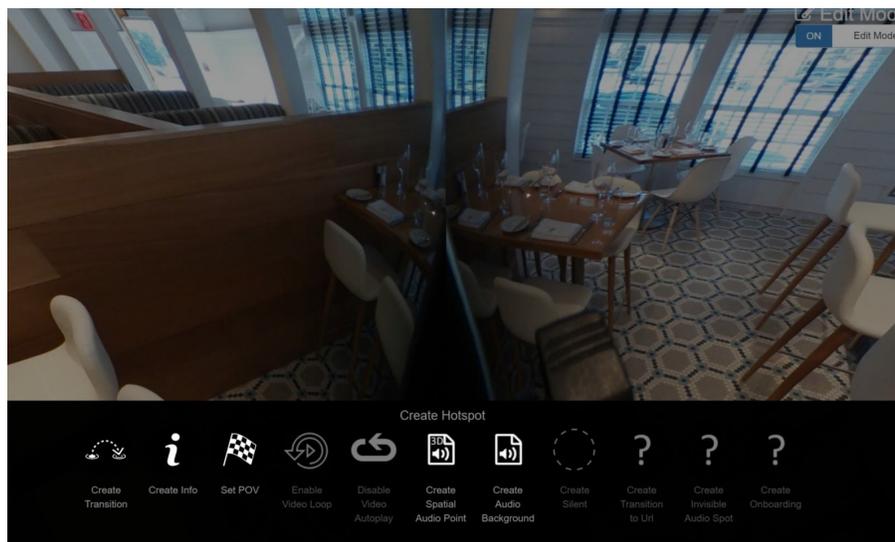
To take a photo with the Gear 360, there's a button at the top of the that, when pressed, starts the timer so the user can go run and hide from the shot (practice this).

I also interviewed and took photos of the restaurant's co-owner, Kurt Bohlsen, whose family has owned the location since 1983 and decided it was time for an upgrade. I used information from him and his brother, who responded separately by email, for both the story and additional details for he Viar presentation.

After stitching the photos, it was clear that I had not been completely lined up at the start of my shots. I had practiced using the camera and hoped to avoid that situation, but this was my first live attempt and I didn't have the assistance of the Samsung app to view the photos in real time. I scheduled time to speak with Dejan at Viar via Skype to go over some issues I was having and that is one of the things that Viar can help with -- it allows users to set points of view.

Without that ability, the first thing people would have seen is the stitched area of the photos.

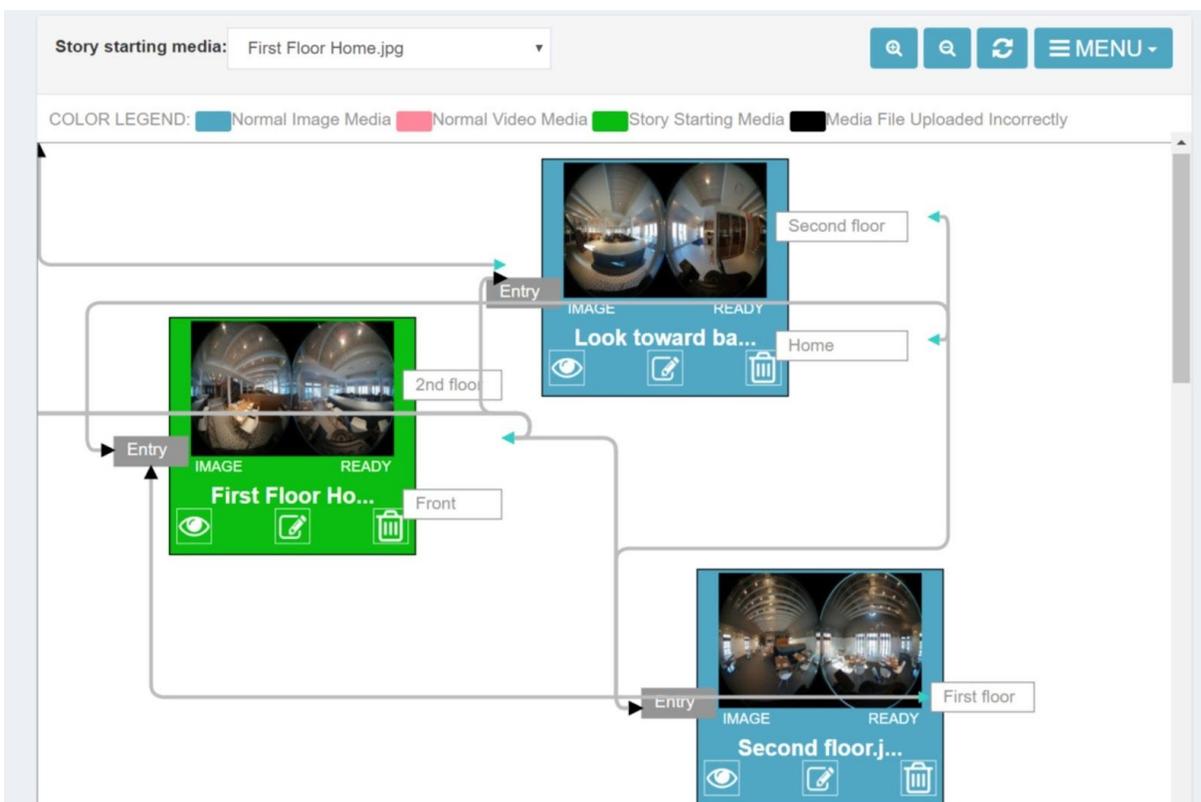
Viar allows various features, including transitions to other photos/videos, adding annotations and setting a point of view, all of which I found extremely helpful to tell the 360 story.



After much playing around to determine which shots worked best, I chose three 360 photos as the basis for my Viar story -- one near the center of the restaurant on the first floor, another near the front of the restaurant by the bar and another on the second floor. The combination of the three, I felt, would allow me to tell a good story. The 180 photos looked stretched out, and with my deadline quickly approaching for Long Island Pulse's website, I wanted to present the best quality content possible, so I abandoned the thought of using them.

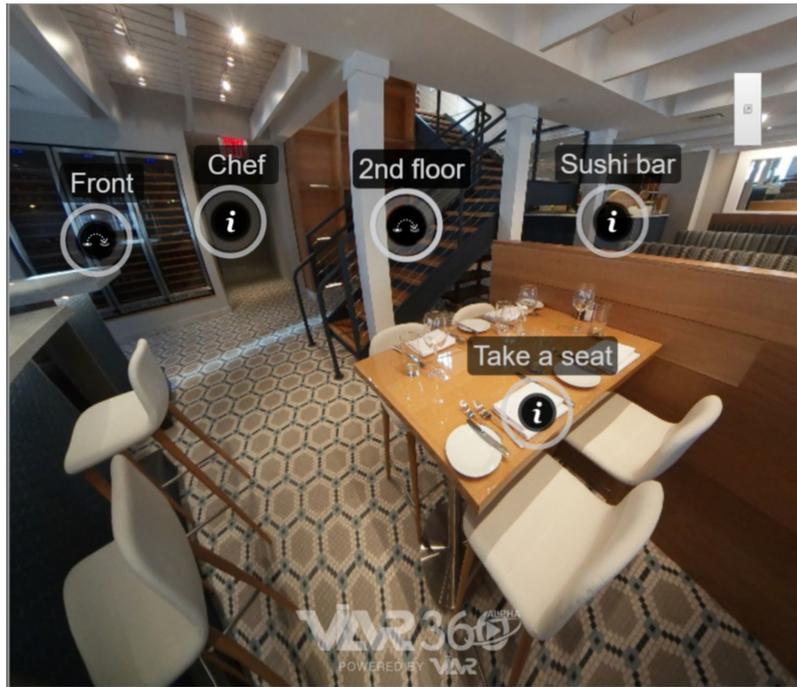
In the Viar editor, I used the photo of the restaurant's center as my starting point to get to other places in the presentation. I added annotations and photos about the bar, the chef and the new sushi bar, and created transitions to the other two locations. Each photo needed transitions to get back to the starting point.

Viar editor



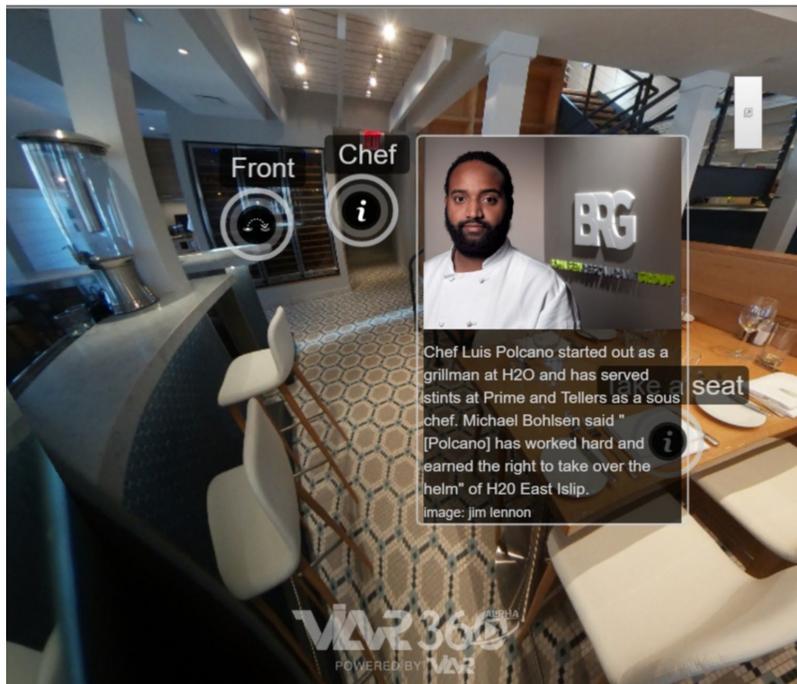
The Viar360 editor allowed me to connect and add information to multiple photos.

Example 1. First floor, center of room



This view allows the reader to go anywhere in the Viar story.

Example 2. Adding an image and information



It took some amount of testing to get the size of the photos to fit their windows appropriately and to make sure the text was the proper size and easily legible. I had to black out the back to a degree. I also played with the size of the titles above the icons to make sure they did not overlap, and kept the informational text to a minimum. Early feedback suggested that would be better.

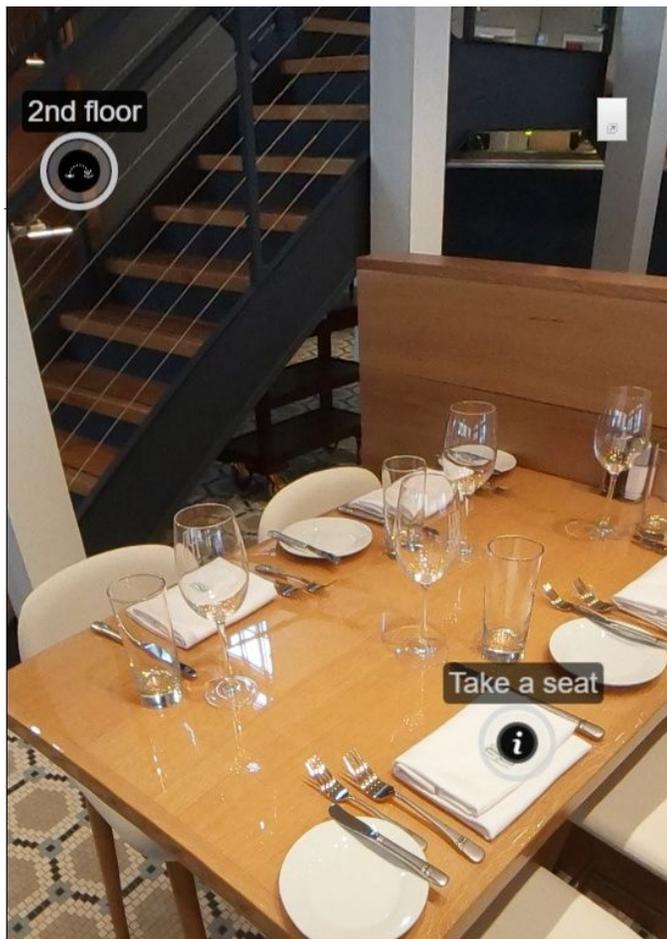
Example 3. Second floor



The transition from the first floor brings the reader to this perspective, with the ability to scroll around to see the whole room.

Viar allows presentations to be embedded into other websites, and I would have thought that the code would easily adjust to our Wordpress theme, but in tests is simply flowed over my text and widgets.

Issues with Wordpress



without changing the structure of the
 use, rearranged the dining room and
 w a place where people like to go and
 e glass available. The restaurant seats
 top-of-the-line equipment money can
 le, so every dollar we invest in the best
 ll lives in the town.
 out 14 until I was in my mid-20s." Kurt
 ation's, but there will be a few new
 brunch menu, two things we do not
 es that you will only be able to get in
 Sushi-grade tuna over wasabi
 every Saturday, and we try to feature
 ave wonderful people work for us.
 have a hit on our hands in no time."
 spent on dinner in a gift card valid in
 ng."

After fiddling with the code to see if I could adjust it to fit, I contacted the Viar people again to show them the problem and asked for assistance. They provided me with new code:

From Viar

“Hi,

I checked out the page and saw the problem. You said you reduced the size by 50%, I would suggest restoring the width to 100% then change the height to 500px and the position to relative. The style field should look like this "position: relative;width: 100%;height: 500px;border: 1px solid #000000;"

```
<div style="position: relative;width: 100%;height: 500px;border: 1px solid #000000;">
```

```
<p><iframe style="position: absolute; width: 100%; height: 100%;"
src="https://app.viar360.com/media?leaf=1KWs2qdtZpSO&amp;ui=false" width="300"
height="150">Your browser does not support iframes.&amp;nbsp;&lt;/p&gt;
&lt;p&gt;&amp;nbsp;&lt;/p&gt;
&lt;p&gt;</iframe></p>
<div style="position: absolute; top: 10%; right: 40px; width: 25px; height: 25px;"><button
type="button"><br>
<br>
</button></div>
</div>
```

So this is the inserted code.”

It came down to the style being relative to fit the screen. I also made the length a little bigger than Viar suggested to best fit the text and images I inserted throughout the presentation.

The full *Pulse* story and Viar experience is available at <http://bit.ly/H20-360>

Metrics

In the four days since the story went live, it’s gotten 292 Facebook shares via Pulse’s website and dozens more likes on the H20 Facebook page,

According to Viar’s analytics, the presentation garnered 2,150 views and 1,337 unique visitors as of 10:50 a.m. Dec. 23. Considering this is a pre-holiday week, that is pretty impressive.

Feedback

Before the project’s launch, I put out a call to select foodies to participate in a quick survey about the story and 360 experience. Few people replied, so I opened it up to a wider group via social media and classmates who tend to eat out.

I received 16 survey responses from Dec. 19-23. A majority (8, or 50 percent) said they ate out a few times a month; 6, or 37.5 percent, said they ate out a few times a week; 1 person (6.25 percent) said they ate out every day and the last person said they ate out less than a few times a month (6.25 percent).

The respondents were pretty evenly divided among age groups:

- 21-29 (4, 25 percent)
- 30-39 (4, 25 percent)
- 40-49 (4, 25 percent)
- 50-59 (1, 6.25 percent)
- 60 or older (3, 18.75 percent)

A majority (9, 56.25 percent) said it was “a great experience” and that “all restaurant profiles should include them.” The remaining people surveyed said:

- It was OK, but I was more interested in the story. (4)
- It was a distraction. (2)
- It didn't work at all on my device. (1)

Interestingly, the majority of people surveyed viewed the story from either a laptop or smartphone (6, or 37.5 percent each), while four viewed it from a desktop (25 percent). No one used a tablet.

Six people provided comments, both positive and negative, via Survey Monkey:

“There are some hiccups, but it really gave a feel for the environment.”

“waste of time.”

“The stitching was very obvious, which was a distraction. I would have liked the option to make the 360 image full screen. I liked the info points.” [Note: There is an option to go

full-screen, would also allow someone to use Samsung’s virtual reality goggles if they had them, but it apparently did not work for some.]

“it didn't work on my browser.”

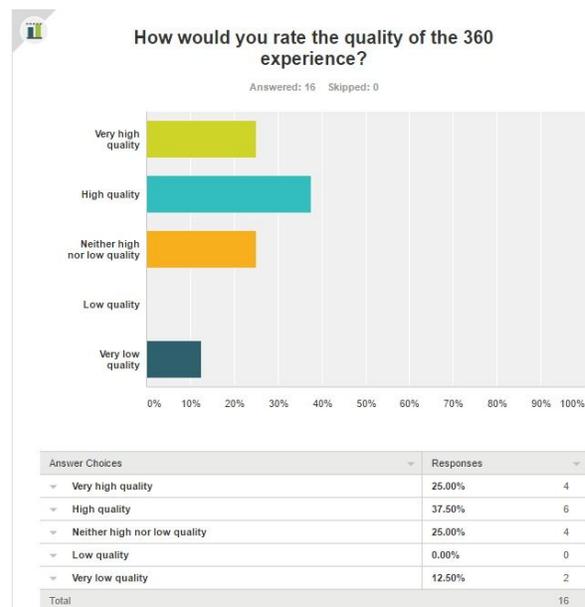
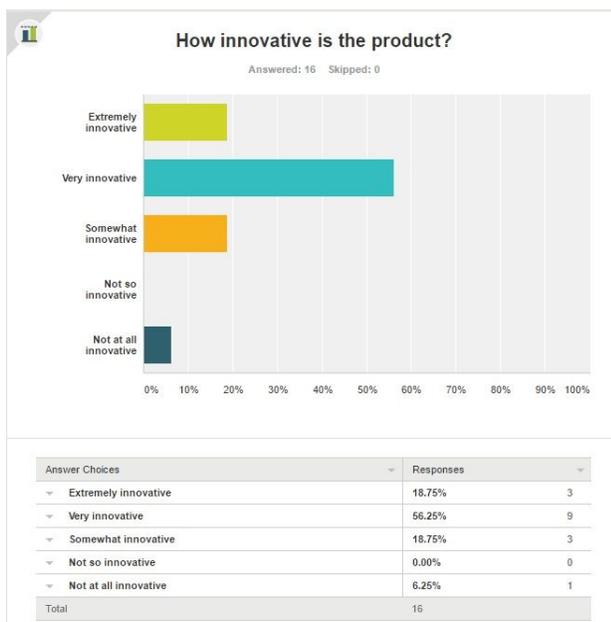
“I did stop reading after I got to the VR tour so that I could play with the video -- so placement in a story may make a difference. But I still stayed on the story and probably for a lot longer as a result. So I'm not sure I would change the placement of it either. :)”

“This looks great and it worked well on my phone.”

On my personal Facebook profile, one person said he could not click off the annotated areas using his phone some, which he found “annoying.” And one other person said the point of view would be at the floor level “and then immediately start looking up onto the ceiling and I couldn't get it to stop looking closer and closer onto the ceiling. If that makes any sense.”

Back to the survey: It also asked for opinions on the concept’s innovativeness and overall quality. See the two graphics below.

The vast majority in both cases rated the experience positively. Nine out of 16 thought it was “very innovative” and 10 thought it was at minimum “high quality.”



Conclusion

Based the feedback, engagement and my personal impressions of whether this was a good value-add to the storytelling experience of a restaurant profile, the answer is yes, with the caveat that there is a lot of room for improvement. I feel I accomplished what I hoped to achieve in this field test, despite many technical snags. Readers were given an inside look at restaurant in a new way even before it opened and the vast majority, according to my survey, enjoyed it.

Areas for improvement

1. The No. 1 thing that needs to be fixed, if someone plans to use a Samsung Gear 360, is that it must become iOS compatible. By only being compatible with the most advanced Galaxy devices, the company is limited its reach, including among journalists. The Galaxy-only approach will also only lead hackers to develop a workaround. Samsung may, in fact, come out with an iOS app to come alongside the launch of its future so-called “Gear 360 Pro.”
2. There should be an option to change the point of view of a photo after it is stitched using the app or potentially even a small screen that could be part of the Gear 360 itself.
3. In Viar360.com, I found a number of bugs. One was being able to move the annotation icons as even when I was out of editing mode.
 - a. Users should also be able to click out of annotated areas with an “X” at the top of the box.
 - b. Embed code should be clear-cut. It should not have to be adjusted to fit particular websites.

4. Although the quality of the photos was high, the areas where the two lenses of the Gear 360 stitched was quite evident. I'm not sure if that was user error on my part or a matter of the the program, but the I don't want to see the stitched areas. I want it to feel as real as possible.
5. The camera itself comes with a very small tripod that has little purpose. I paired the camera with a 5-foot tripod so that it could stand on its own in the middle of the room. I would suggest finding a way to incorporate a larger stand so that it can be used in different scenarios.

The Future

My field study touched on only a few things that the Samsung Gear 360 can do. It can also shoot 360 video and record looped video and time-lapsed video.

For my target audience of restaurant-goers and foodies, I could see this being used for quick, social-media friendly behind-the-scenes shoots with a chef preparing a signature dish, or a time-lapse video to show a day in the life of a busy restaurant. I also don't think we should have to depend on the app to stitch and share content. Do it through voice activation.

Overall, I think 360 photos and video will only grew in use, maybe not as much as drones have in recent years, but they will grow fast, and they will increase the amount of time people spend on videos. That's what Sarah Hill, the CEO and Chief Storyteller for StoryUP VR, a global VR native media company in Missouri, found in a case study published by MediaShift.

There are a number of YouTubers doing 360 videos, and years down the road, when someone develops a technology to defy gravity, I can see Gear 360-like devices following vloggers around everywhere in real time. YouTube already allows 360 live streaming and

Facebook started testing it earlier this month with a National Geographic broadcast from the Mars Desert Research Station in Utah. Facebook will expand that usage to include pages and profiles in 2017, Campaign reported.

<http://www.campaignlive.com/article/national-geographic-partners-facebook-platforms-first-360-degree-live-video/1418768>

Come to think of it, 360 photo abilities are likely to be incorporated into every smartphone at some point, which will lead to greater use of virtual reality glasses (once they come down in size and price), so expect to be immersed in everyone's lives like never before.

Liffreing, I. (2016, Dec. 14). Campaign. National Geographic partners with Facebook for the platform's first 360-degree live video. Retrieved from <http://www.campaignlive.com/article/national-geographic-partners-facebook-platforms-first-360-degree-live-video/1418768>

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