Radical new 'focus later' camera begins shipping

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The Lytro is the creation of Ren Ng, who started work on the digital camera while studying for a doctorate in computer science at Stanford University in California.

The telescope-shaped camera uses what is known as "light field technology" to allow the focal point of a digital image to be changed after the picture is taken, a feature that Lytro calls "shoot now, focus later."

Clicking on a Lytro picture displayed on a computer screen allows a

viewer to shift the focus from a subject in the foreground, for example, to a subject in the background.

The Lytro can do this because it uses powerful sensors to capture significantly more light than a conventional camera.

Lytro chief executive Ng, who was born in Malaysia and raised in Australia, describes the images as "living pictures" because of the ability to manipulate them.

"This is a very exciting time for our growing Lytro team," he said in a blog post to mark the shipments of the first models. "We finally get to see how you use the Lytro camera to create and share your own living pictures."

When Lytro pictures are shared online, the "light field engine" travels with each image so anyone can interact with them on desktop and tablet computers or on smartphones.

The 16-gigabyte model of the camera, which is about the same size as a stick of butter and can fit easily in a pocket, costs $499 and can hold 750 pictures. An 8GB version costs $399 and can capture 350 images.

The first reviews of the Lytro came out on Thursday and were full of praise for the technological leap the camera represents.

"The consumer point-and-shoot camera has just been reinvented -- not tweaked, or remodeled, but actually re-thought from top to bottom," said Walt Mossberg in The Wall Street Journal.

"I consider it a revolution in consumer photography," Mossberg said.

At the same time, the Journal's influential technology reviewer did point

out some of the Lytro's limitations.

Mossberg noted that for now at least Lytro pictures can only be imported to a Macintosh computer with its accompanying software and the process is slow because of the relatively large files.

The Mountain View, California-based Lytro has promised that a version for computers powered by Microsoft's Windows operating systems will be available later.

Sam Grobart of The New York Times described the refocusing capabilities of the Lytro as "astonishing" and "fairly mind-blowing."

"Refocusing a Lytro image, I felt like one of those CIA agents in the movies who is looking at satellite images and asks some technician to 'enhance' the picture until Carlos the Jackal comes into focus," Grobart wrote.

He also highlighted drawbacks with the current model.

"While refocusing is its own interesting tool, that's the only tool you have at this point -- adding a filter or importing the image into Photoshop remains impossible," Grobart said.

"Should Lytro's engineers refine light-field photography into something more versatile and cheaper (imagine this on a smartphone), it may turn out to be a game changer," he said.