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Get Creative!

GOING MOBILE

By Gerry Blackwell

A few years ago, when Patrick O'Neill, Founder and CEO of Olloclip, discovered how much fun it was taking pictures with his iPhone, and how surprisingly good the results could be, he had a brain wave.

"Wouldn't it be cool," O'Neill recalls thinking, "if you could put different lenses on your iPhone, to take wider-angle pictures, say, or extreme close-up shots?"

In some ways, it was a crazy idea. Part of the charm of shooting with an iPhone is that it's so simple and spontaneous. Even if you could figure out a way to attach lenses, would anybody want to do it?

That germ of an idea remained dormant for a year or so. Then, as the quality of iPhone cameras kept improving by leaps and bounds, and more and more consumers abandoned traditional photography for smartphone-ography, O'Neill got serious about his idea. He hired consulting engineers to help design the lenses and figure out how to attach them, and then pitched the idea at crowd-source venture capital site, Kickstarter.com.

The result is the Olloclip, a brilliantly elegant three-in-one photo lens for iPhones. It clips securely to the corner of an iPhone 4/4S/5, covering the built-in lens. Depending which way you attach it, the Olloclip provides a fish-eye, macro or wide-angle capability. It weighs a few ounces, is small enough to fit in a shirt pocket, and attaches in seconds.

The answer to the question about whether anyone would want to use such a product is apparently yes. Less than two years after O'Neill created the Kickstarter pitch at his kitchen table, Olloclip has arguably become one of the



The Olloclip 3-in-1 add-on lens for the iPhone began as nothing more than a crazy idea, and has since become one of the hottest products in the creative smartphone accessories category.

An artist hard at work at Sony's CES booth this past January points to the trend toward using smartphones and tablets for creativity, not just content consumption.

hottest mobile accessories companies, if still a long way from being among the biggest.

The employee count is up to 40. The products are sold in every Apple Store in the U.S. and Canada. (Apple discovered Olloclip online and approached O'Neill.) It's available at Best Buy, Henry's, Black's, and several smaller retailers in Canada. In the U.S., it's in Wal-mart, Target, Sprint and dozens of independents. It's also in shops across the rest of the world.

"People are using Olloclip to take amazing photographs," O'Neill enthuses. "It's bringing out the artist in people who didn't know it was there before."

Mobile Creativity

Olloclip is a great business story, but it's also the tip of a trend iceberg that electronics retailers need to be aware of, and figure out how to exploit.

It's not just Olloclip bringing out the artist in people, it's mobile devices in general; smartphones, tablets, 'phablets,' and their evolving ecosystems of apps, accessories and 'appcessories.' More and more, consumers are finding ways to use their mobiles to generate original content, and not just short texts or business documents. Many are using them for seriously creative activities.

Needless to say, this is truest of young people. Carolina Pini, Brand Marketing Manager for Mobile Communications at LG Canada, tells of a friend's 11-year-old daughter who produced a surprisingly slick-looking video of herself dancing to a pop song. She shot the video, edited it, and posted it to a sharing site, all with her smartphone.

"They know everything, all the features, they know all the apps they can download for video production on the device and then post-production," Pini says. "I was blown away. Eleven years old!"

Photography and videography are the most obvious examples of mobile creativity, probably the dominant modes of mobile expression. That's hardly surprising given the devices have built-in cameras and have for years since Sony Ericsson introduced the first camera phones.

But consumers are becoming aware of other possibilities as well. Drawing and 'painting' on the screen, for example. Professional artists, including a few art world stars such as

David Hockney, routinely use iPhones and iPads to create serious work.

Creating and recording music is another example. Apple's popular GarageBand app for the iPhone and iPad showed the way. Many have followed, and many have taken it further.

Professionals have created original music using their mobile devices with purpose-built recording accessories. Artists routinely capture video of concert and touring experiences with their mobiles to share with fans. The Canadian indie rock band *Metric* made a video featuring clips shot on Sony's Xperia ion smartphone by fans watching a performance. And some performers are using tablets to display music notation while playing.

Inventors have even created entirely new musical instruments (in software) that exploit the multitouch interface and sound reproduction capabilities of mobile devices.

It's no coincidence that BlackBerry, as part of its BlackBerry 10 launch, announced the appointment of a "global artistic director," in the person of pop princess Alicia Keys. The message is clear (if slightly counter-intuitive given the brand's history): the BlackBerry Z10 isn't just for business, it's for creativity too.

Mobile creativity is not an easy trend to quantify, or even define. But distributors, retailers and manufacturers agree that it represents a golden opportunity for dealers to cash in and sell more accessories, and more mobile devices.

The clearest statistical evidence of a change in consumer behaviour may be the decline in sales of point and shoot digital cameras. Consumers don't need digicams anymore because they have cameras in their smartphones with similar or at least adequate functionality, or so they perceive. Sales of DSLRs and high-zoom point-and-shoots, meanwhile, continue to grow, but those products offer advanced capabilities smartphone cameras can't match.

Mark Haar, Director of Consumer Electronics at market researcher The NPD Group, says Canadian point-and-shoot sales dropped 26% in 2011 and a further 24% in 2012.

"The smartphone is certainly a key causal factor, but we're not able to quantify the specific impact," Haar says.

Trevor Robertson, Vice President of Business Development at Vancouver, BC-based mobile accessories distributor Atlantia, says his retailer customers are telling him their

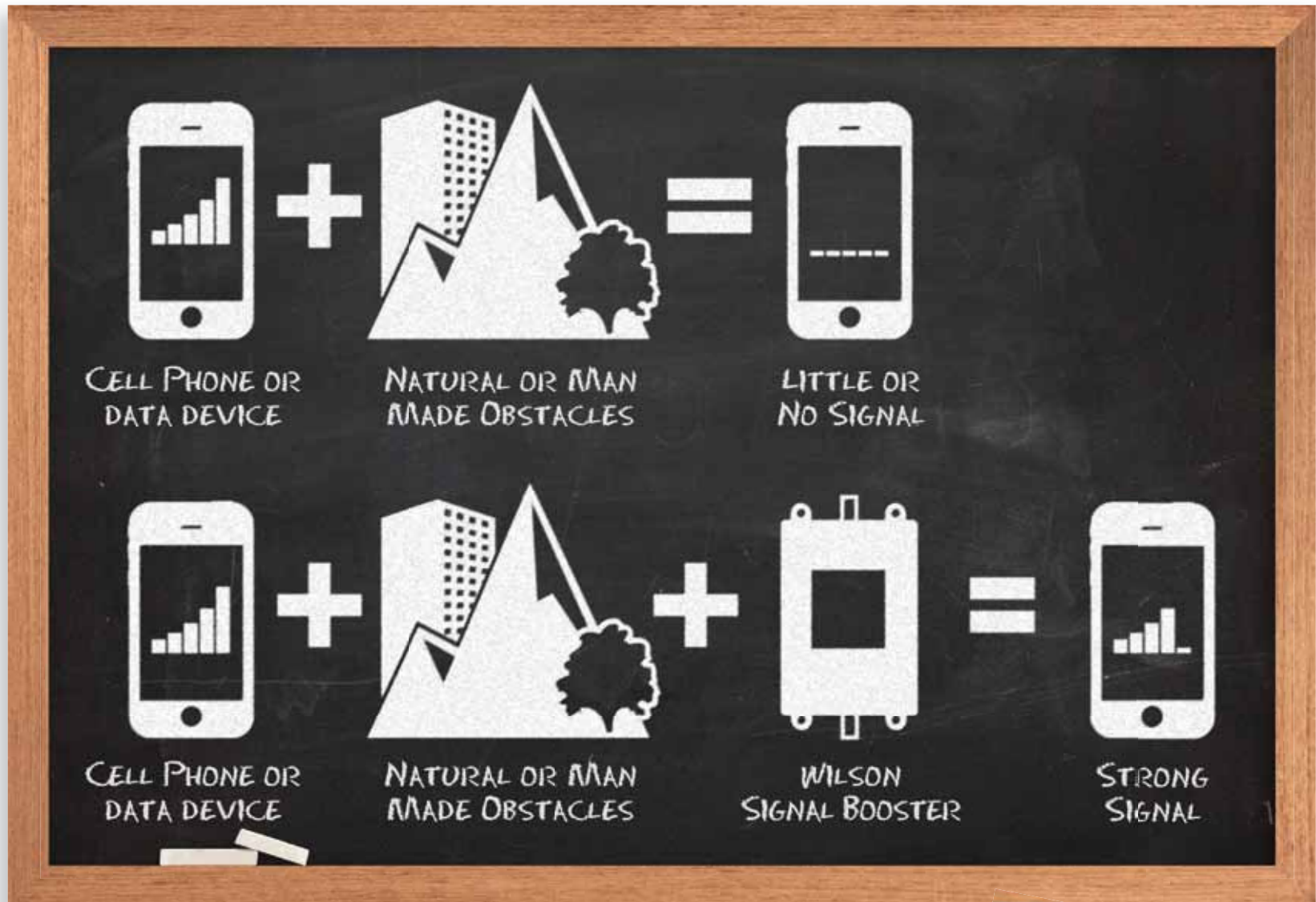
Overview

- Consumers are finding ways to use their mobiles now not just to consume, but also to generate original content.
- Smartphones and tablets are becoming valuable tools in photography, music, and video creation as well as editing and manipulation.
- While many tasks can be performed using free or paid apps, or built-in functions, there are a number of third-party accessories that retailers can stock in this category to enhance the experience for consumers, and capitalize on the trend.
- Creativity accessories for mobile devices can help offset declines seen in other traditional categories, like point-and-shoot digicams.

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point-and-shoot sales are off by more like 40% to 60%. As Robertson points out, retailers need to replace that lost revenue with something. Products like the Olloclip (which his company happens to distribute in Canada) would be a logical choice, he argues.

Consumption vs. Creation

The conventional wisdom until fairly recently was that mobile devices were great for content consumption, but not so much for content creation. That is clearly changing.

"I don't have any scientific evidence [that consumers are using mobiles more for creativity]," says Vicken Kanadjian, Managing Director of Montreal, QC-based distributor Cesium Telecom Inc. "But I do notice a lot more people in my own ecosystem; friends, family, colleagues; using smartphones and tablets for creating photos, music, art. And we're selling a lot more accessories tailored to this type of activity."

Allan Kambeitz, Director for Portable Computing at Future Shop and Best Buy Canada, says the retailer saw strong pre-Christmas sales of products such as Crayola's DigiTools for iPad, a set of hardware accessories that enhance the experience of using the company's popular crayon art app for children. Stylus sales have also picked up, Kambeitz notes, and his sense is that consumers are buying them at least partly to use with drawing and painting apps.

Most of those we talked to agree the change in usage patterns has boosted sales of accessories. Robertson says that while the majority of his company's sales still come from cases, protective screens and chargers; the traditional troika of category winners; sales of accessories that enable content creation are growing faster.

Some also believe mobile creativity, and the availability of innovative enabling accessories like the Olloclip, may actually boost sales of mobile devices themselves, as consumers realize they can do more with these devices than they may have once thought. "I absolutely do think that it has a positive impact [on mobile device sales]," Kambeitz says. "Although I don't have any tangible evidence that there's 'x' amount of lift."

Ken Price, Director of Marketing for Mobile Communications at Samsung Canada, notes that the premium products in his company's lineup, those with the advanced features needed for content creation (higher resolution cameras, faster processors, bigger screens) are among its best sellers. The Galaxy Note II, a smartphone with a 5.3-inch screen, largest on the market, is an example, he says.



Samsung's S-Pen, which ships with the Galaxy Note tablet, isn't just a standard stylus. It comes with handwriting recognition technology, plus features like Air View for hovering it over the screen to activate certain tasks.

"You have to want to pay for that premium hardware experience, and also carry something larger," Price says. "That's in exchange for the expanded possibilities of what you can do with that more powerful hardware." Including creating original content.

So what happened to turn the conventional wisdom on its ear?

Drivers

Innovation breeds innovation. The mind-boggling ingenuity and technological sophistication that go into modern mobile devices such as the iPhone, iPad and Samsung Galaxy products inspire people like O'Neill; designers, app developers, entrepreneurs. They see possibilities that others, even the device manufacturers sometimes, don't, and gamble that consumers will see them too.

"What fundamentally changed is access to apps," says Farhad Esmail, Director of Marketing for Mobile Communications at Sony Canada. "You have endless possibilities now for creating new experiences [on mobiles] for consumers. You have to find an audience, of course, and you have to be able to reach it. But it [apps and the app distribution infrastructure] means you can do all kinds of unique things."

He's right: apps are key. Dealers need to understand the role and impact of apps, even if they offer no direct retail selling opportunity.

The iPhone's camera app (and of course the built-in camera hardware too) came first, then products like Olloclip. Drawing and painting apps such as Art Rage, Layers Pro and Paper, created demand for styli that make it easier for artists to draw and paint on a touchscreen. Music making and recording apps such as GarageBand, BeatMaker and dozens of others, inspired musicians to think of also recording from analog sources, creating demand for microphones, adapter cables, and outboard mixers.

Mobile device manufacturers recognize all too well the power of apps. Apple, as well as masterfully fostering its iOS app development community and distributing its wares (to great profit to itself, of course), also chips in with its own apps. Many, it's worth noting, are content creation apps that

expand the possibilities of what people can do with these devices. GarageBand and iMovie are prime examples.

Android device makers also sometimes jump in where they see an opportunity to show consumers new ways to use a product. Samsung's Galaxy S Note is a sophisticated note-taking app, for example, Price says.

If BlackBerry or Microsoft Windows 8 Mobile currently lag iOS and Android, it's largely because they have failed so far to attract app developers in as large numbers as Google and Apple have.

While Android now boasts as many apps as iOS, there is a clear iOS bias in the accessories market. Because the design of many accessories depends on the device form factor, it's easier for designers, witness Olloclip, to focus on iPhone or iPad only because there is a huge base of customers with exactly the same product. In the Android world, there is a welter of different form factors.

Innovative apps and accessories are important, but as Price says, "It's a combination of factors. The horsepower and the apps both have to be there."

Kambeitz agrees. "Part of the challenge was that these devices weren't very powerful to begin with. It was limited what you could do with them. The ability to do creative things on a mobile is much more advanced now than it ever was."

The increasing power and sophistication of the devices has spurred and will continue to spur innovation. "I don't think anyone ever said they don't want to create on their mobile," Robertson observes. "But they needed a mature product to do it with. It's a bit of a chicken and egg thing."

The technology is clearly maturing fast. Quad-core processors for tablets and smartphones are rapidly becoming industry standard. Double or quadruple the RAM of first-gen iPads: 2 GB at the top end is now common. That power is needed to make sophisticated art, video, photographic and music apps work efficiently, and enable attachment of peripheral devices.

At the same time, larger, higher-resolution screens on mobiles make creative apps easier to use, especially apps for drawing/painting, photography and videography. Most recent tablets and premium smartphones can display full 1080p HD or higher resolution.



Carolina Pini, Brand Marketing Manager, LG Canada: "The relationship that consumers have to their smartphones is a very intimate one. [They expect them to] capture, create, edit, modify, to share feelings and special moments."



Mark Haar, Director of Consumer Electronics, The NPD Group notes that point-and-shoot camera sales dropped 26% in 2011 and 24% in 2012, and he points to the smartphone as being a key causal factor.



Trevor Robertson, Vice President, Business Development, Atlantia Products: "I don't think anyone ever said they don't want to create on their mobile. But they needed a mature product to do it with. It's a bit of a chicken and egg thing."



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"I don't think consumers, off the top, walk in and say I need a higher-resolution screen," Kambeitz says. "But when they see it with their own eyes, it doesn't take long for them to realize the value, especially when they're working with video or photos."

Smartphone screen sizes, meanwhile, keep getting bigger (even while some tablets are shrinking.) Samsung, Sony, LG, Huawei and HTC have all either introduced or are expected to introduce this year models with five-inch or larger, 1080p screens. Price says that in the next generation of Samsung's five-inch-plus smartphones, the bezel will be whittled to the point that the device appears to be all screen. As a result, they'll be little bigger overall than four-inch smartphones. Sony already touts its flagship 5-inch Xperia ZL smartphone as having a screen that occupies 75% of the front of the device versus the 60-68% that's common in others.

Finally, and perhaps most importantly from the point-of-view of figuring out how to exploit this trend at retail, a few 'soft' factors play into the equation.

Consumers have become very attached to their mobile devices. "The relationship that consumers have to their smartphones is a very intimate one," Pini says. "People love their phones. It's a part of their lives now more than ever." And they have come to expect those devices to be able to do everything, but especially, she argues, to "capture, create, edit, modify, to share feelings and special moments," and to reflect and express their owners' lifestyles.

Touchy-feely stuff, but potentially important.

The other related factor is the role of online sharing services such as Instagram, Vimeo and YouTube; and social media sites like Facebook. Instagram in particular, Robertson points out, was designed with mobile users in mind. It didn't even have a conventional Website until fairly recently.

"We live in what is termed a sharing economy," Esmail says. "The fact that we live in this personalized world means we can choose to communicate whatever narrative about ourselves that makes sense to us, creating a kind of self-actualized brand."

Creating content with mobile devices and more or less instantly uploading it is at the heart of this behaviour. It's not perhaps the same as a professional (or amateur) artist setting out to create a painting in ArtRage, or a musician mixing a track in GarageBand, but it is a form of creation and it's very prevalent, especially among younger demographics.

It's clear consumers want to be creative with their mobile devices. We get it. But what do they need to help them be creative? Apps, of course, but apps are sold from online stores controlled by platform vendors, and typically for next to nothing, if not free. That leaves accessories. Of which there are hundreds, many fantastically ingenious. See the sidebar at the end of this article for a tiny sampling.

It's in the Phone

It's worth noting that there are features and products that come direct from the smartphone manufacturers themselves. Consider Samsung's S-Pen, a sophisticated stylus, an enhanced version of which ships with the latest Galaxy Note 8 tablet. With the handwriting recognition technology, remove the S-Pen from the tablet and it automatically launches features like Pen Detection. Using the new Air View capability, the S Pen need only hover over the screen to show previews of videos, e-mails, photos and appointments on S Planner without opening the file or application in full. S Pen Gesture allows images and content to be easily edited and cropped, while Paper Artist and Photo Note allow photos to be artistically personalized.

LG has features like Panorama Note with its latest Optimus devices, which lets artists see portions of the canvas on the mobile device rather than the big picture (literally) so they can zoom in and work on intricate details without needing a big screen.

In-phone cameras are also including more interesting



Available in its latest Optimus devices, LG's Panorama Note function lets creative types hone in on a specific area of a virtual canvas to work on intricate details via the small screens.

features, like BlackBerry's Time Shift feature in the Z10, which lets you rewind or fast forward a photo to correct for issues like closed eyes or turned heads; and Samsung's Dual Camera for placing the photographer into the image or video via a number of cool effects. Nokia's Lumia 920, a Windows 8-based device, has the option to download a neat app for creating animated GIFs from your still images.

And these are just a few examples. The list goes on.

Retail Strategies

Bottom line: you can't carry everything. Even Future Shop and Best Buy can't carry everything. Kambeitz says that while Future Shop now carries a "fantastic" range of creativity-enabling mobile accessories in its stores, some of it only sells online.

"We just don't have room to fit everything on the floor," he says. "But this has given us the opportunity to test online to see what the response will be." If it's good, then it makes sense to bring the product into the store. It's a strategy others recommend as well.

The basic tips that are always hammered home in any category are re-iterated by all of those we spoke with: show how the products can be used to enhance the

experience, and merchandise them effectively. Too many retailers have not been as innovative as they could be, manufacturers and distributors charge. Even something as simple as featuring tablet accessories on the same page as the tablets in a flyer has made a difference, says Kambeitz.

The mobile creativity phenomenon isn't going away any time soon. As Robertson says: "Whenever you have an installed base this big, there's always going to be people coming out with new and interesting things to help grow it."

As processors get faster, screens bigger and higher resolution, and as consumers realize what a powerful tool for expression they have in their pockets, the Patrick O'Neills of the world are going to come along with ingenious, enticing accessory products. How many can you sell? **mn**



Apple's popular GarageBand app for the iPhone and iPad helped to fuel the trend toward creating and recording music using mobile devices.



At the absolute simplest level, free apps like Draw Something and Instagram opened the industry's eyes to the consumers' desires to get more creative with their mobile devices.



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Depending on how you attach it, the Olloclip provides fish-eye, macro, or wide-angle capability to the iPhone's built-in camera.



Makayama's iPad Movie Mount is a hard shell plastic case that turns an iPad into a serious video camera.



For the really creative types, Schneider Optics offers the \$200-\$300 iPro Lens System for the iPhone, which includes 2x telephoto, fish-eye, and wide-angle lenses, along with a hard case and bayonet mounting system.



Clipping the Snappgrip onto an iPhone allows you to hold the smartphone just like a point-and-shoot camera, thus making it easy to snap photos one-handed using the built-in shutter release.



With the ability to be used in extreme environments and mounted on everything from a ski pole to a person's body, the Liquid Image Ego + Wi-Fi digital video camera can wirelessly connect to an iOS or Android device for remote control, live view streaming, and to play back video.

Mobile Creativity Accessories:

The three main categories for mobile creativity include photography, music, and videos. And there are third-party accessories in all three categories that run the gamut, from simple add-ons, to more sophisticated devices. Herewith is a sampling.

Smartphone-ography

There are two broad categories of products for photographers and videographers: those designed to extend the capabilities of smartphone cameras, like Olloclip, and those that let you use your mobile in support of traditional photography and video.

Olloclip is not alone in building interchangeable lenses for mobiles. Photojojo has the Photojojo Phone Lens Series. It's a set of three discreet lenses: telephoto, wide-angle/macro, fisheye, that sells for US\$49.

Unlike Olloclip, which only works with late-model iPhones, Photojojo claims its lenses work with any smartphone or tablet. The system for attaching them requires semi-permanent installation. It's a ring of magnetic material that sticks with adhesive to the mobile's chassis, surrounding the built-in lens. The Photojojo lenses then stick magnetically to the ring.

It may not be as elegant in some ways as the Olloclip, and possibly too fussy with three pieces instead of one. But for most smartphone-ographers, it's more versatile, and cheaper.

At the high end, Schneider Optics, the U.S. subsidiary of German optical manufacturer Schneider-Kreuznach, has the iPro Lens System for iPhone 4, 4s and 5 only. (It's distributed in Canada by Gentec.) The system includes discreet 2x telephoto, fisheye and wide-angle lenses, and a hard case for the iPhone that incorporates a bayonet mounting system for the lenses. There is also a "handle" that screws into the iPro case and doubles as a holder for the lenses.

The iPro lenses are sold online in kits of two or three lenses, priced from \$199 to \$299, or sold separately from \$79 to \$105. The case is \$31. Are the smartphone-ographers in your customer base ready for a \$300 lens system?

There are scads of other possible accessories. Photojojo has a battery-operated Photo Spotlight that works with virtually any mobile. Studio Neat has a \$30 Tripod Mount and Stand that lets users attach their iPhone to any standard photo tripod. Joby, maker of the GorillaPod flexible tripod products, has a few different versions for use with smartphones.

Makayama, a Dutch company, makes the simple but brilliantly-designed iPad Movie Mount, a hard-shell plastic case that turns an iPad into a serious videocam. The tablet snaps into the Mount, which has a tripod port, a shoe for attaching accessories such as outboard microphone or movie light, and a sliding lens mount that lets you screw in third-party lens extenders and then switch easily between extender and native lens.

Accessory possibilities are almost endless. And new, ever more ingenious items are coming to market all the time. SnappGrip, another Kickstarter company, is about to begin shipping an iPhone case that basically turns the phone into a point-and-shoot camera. It adds physical camera controls, including a conventional shutter button, making it easier to shoot one-handed. IR-Blue, yet another Kickstarter-funded start-up, is developing a live-view thermal imaging system that uses a smartphone.

Photo/Video Support

And then there are products designed to exploit the capabilities of smartphones and tablets to enhance traditional photography and videography. Several companies, for example, have remote shutter release products that let you use your mobile device to trigger a DSLR shutter.

Why would anyone want to do this? To automate time lapse photography, or set timers for other reasons. To simplify using the camera's Bulb mode for long exposures. To shoot candids with a tripod-mounted DSLR: wait for the target to come in range and click without going near or even looking at the camera. (Yes, you could do this with the wireless remote available for many DSLRs, but most remotes use IR, requiring line of sight.)

At the simplest is a product like the ioShutter SLR (about \$70) from Enlight Photo. It plugs into an auxiliary port or the remote shutter release socket on the camera (there are versions for Canon and Nikon products). The other end goes into the headphone jack on the iOS device.

A free mobile app lets you program the shutter release, to set the number and frequency of time lapse frames, or the amount of time the mirror stays up in Bulb shots. The

ioShutter app can also be set up to trip the shutter when the user shakes the mobile device, or in response to a prearranged sound.

Triggertrap Ltd. has a similar product, Triggertrap Mobile. The free app on its own can be used to trigger the mobile device's shutter. With the addition of a dongle and camera connector (about \$30), similar to the ioShutter, it can be used to control a DSLR.

Triggertrap adds a few interesting wrinkles. It can use the iOS device's built-in GPS receiver to do "distance lapse" photography from a moving vehicle, make exposures every so many metres or kilometres, rather than every few seconds. And it can be used with two iOS devices, one a slave attached to the camera, the other a master connected to the slave over Wi-Fi. The master can then wirelessly trigger the camera's shutter and change settings.

The tiny BlueSLR dongle uses Bluetooth to communicate between camera and mobile. It plugs into a camera's USB port. The free companion app for iOS or Android lets the user remotely trip the shutter from a mobile device, using various programming modes, including time lapse. Satechi has just released a similar Bluetooth-based product (about \$45).

Finally, CamRanger has a high-end option (about \$300) that works wirelessly, and not only lets the user remotely trigger the shutter according to various programs and timers, but also streams video from the camera in live view and allows control of focus and zoom and most other camera functions.

Customers serious about integrating mobile device and DSLR will likely need custom mounting options. TetherTools has a whole range of products for photographers and videographers, including the Wallee Connect Kit for iPad and Samsung Galaxy (about \$120.)

The kit includes a simple hard-shell case, similar to, but lighter and less obtrusive than, the Makayama case, into which the tablet snaps. The Connect mechanism, which looks a bit like a door knob, locks into the patented connector on the back of the Wallee case. It provides a variety of connection options, including 1/4-inch tripod head, 3/8-inch tripod mount, 5/8-inch Pin for light stands and clamps and connectivity for Arca-style mounting systems.

The Wallee kit creates a surprisingly rock solid connection and offers endless versatility and expandability. The case on its own (about \$40) can be paired with the Connect Lite (about \$50) to provide a simpler set of mounting options. The Connect Lite also turns the Wallee case into a very elegant table stand for the tablet.

Mobile Cams

Another set of products, while not strictly accessories for mobile devices, were built from the ground up to be used on the go and, in some cases, to integrate with iOS and/or Android devices. Wearable and mountable digital camcorders, designed mainly for use by extreme sports aficionados, is one example.

The Liquid Image Ego + Wi-Fi (about \$180) is a full HD (1080p 30fps, 720p 60fps) digital video cam with a 12-megapixel sensor for still photography. The Ego produces brilliant quality wide-angle video in the most extreme environments, markedly better-quality video than smartphones or tablets produce.

The tiny, lightweight camera can be mounted on ski poles, wind surfer masts, hang glider struts, bicycles, motorbikes, helmets or a person's body, using a range of optional mounting accessories. Ego is built tough to withstand extreme conditions that an iPhone or iPad never could. A key to this product's appeal is that it integrates with Android and iOS devices, using built-in Wi-Fi capabilities and a free app. Users can remotely control the camera from the mobile, stream live-view video from it, and play back video.

Other companies, including GoPro and Muvi, have similar camera products, but none so far offers the same Wi-Fi connectivity with mobile devices out of the box.

Introduced at CES, Mophie's OutRide is a combo case and wide-angle lens for the iPhone 4. For US\$149, users can shoot at a 170-degree wide-angle view. The polycarbonate case has interchangeable backs: one for shooting on dry land, and another for use in up to five meters under water. As with other similar wearable camera accessories, it can be worn or mounted in a number of ways and on a number of devices; from around the head, to adhered to a flat surface, or even clipped to a bicycle's handlebars.

Let There be Music

Apps that enable musicians to record to their iOS or Android devices or mix music on the fly using mobiles are almost liter-