

ABA TECHSHOW®

2 0 1 5

CONFERENCE AND EXPO • APRIL 16-18, 2015

Conference: April 16-18, 2015 - Hilton Chicago - Chicago, IL

Fashion Do's and Don'ts – How Will Wearable Tech Work in Your Law Practice

Presenters

Robert Sisson

Rick Georges



www.techshow.com

#ABATECHSHOW

PRESENTED BY THE

**ABALAW
PRACTICE
DIVISION**
The Business of Practicing Law

Fashion Do's and Don'ts – How Will Wearable Tech Work in Your Law Practice

Submission by Robert Sisson

MY FAVORITE PICKS IN SMARTWATCHES

By Attorney Robert Sisson

ASUS ZenWatch

I love trying new technology. I also have always been a person who wears a watch! The ZenWatch is a new addition to the Google Wearable platform. The watch runs the “Google Now” platform. Therefore, the functionality of the watch is literally like every other Android Wear watch. You can receive your emails, texts, IM’s, notifications, etc., on the watch.

ZenWatch’s style:

ASUS ZenWatch



It has a square face with an elegant leather band and clasp. While being a tad bit bulky, I like the clasp attachment as opposed to the normal watch band clasp. This clasp snaps onto a metal assembly, which is adjustable to size the watchband to your wrist. Once in place, the clasp snaps firmly in place and will not come loose without pressing the two release buttons on either side of the clasp head. The watch face is very snazzy and stylish with a stainless steel body, rounded edges on the watch casing and a

slightly- curved screen. It gives the look and feel of a nice piece of jewelry. Compared to my daily driver “the Moto 360,” it’s approximately 18% thinner. I have always gravitated to “thin watches” so I immediately took a liking to the ZenWatch.

While the ZenWatch still has a fairly large screen, it certainly is smaller than many of the first generation touchscreen watches. As a lawyer, I want the timepiece on my wrist to be stylish and elegant with a bit of a sexy flair- which I feel the ZenWatch accomplishes nicely. It doesn’t scream to those noticing the timepiece on your wrist that “I’m a smartwatch.” It does deliver a message that it is a fashionable time piece. To make it look more like a “regular watch,” I set the watch to be “always on.” At first, I was afraid that setting it to “always on” would run the battery down very quickly, making the watch “worthless” without carrying a charger in my back pocket and always looking for a wall outlet. Well, I was pleasantly surprised. I did set the “always on” feature to one of the lower settings to experiment with. After 12 hours of use, I was only down to 53% battery left. Obviously, you will have to charge this time piece daily; but there is no concern about running out of power on a normal day! The battery management is excellent compared to many other smartwatches which drain the battery at a much quicker pace. My Moto360 would go down to roughly 25% battery with the same usage scenario. I love the “always on” feature as the watch looks like as normal of a time piece as possible. When you lift your wrist to view the watch face, the full display comes on in all of its glory and power. My ZenWatch came with a reddish-brown band, but like most smartwatches, you can swap the band out with almost any standard 22mm watch strap.

Typically each watch manufacturer comes up with a few extras, above and beyond what the Google or other operating system provides. The fitness-tracking feature features an idle alert. This started out originally in the Jawbone fitness trackers. The nudge alerts you to get up and move around if you have been sitting still for too long a period. While I practice in many different counties; I walk to the courthouse nearest my office. The watch does a great job in tracking my steps and my health in general with a heart rate monitor feature. Yet, a feature that comes with the ZenWatch to avoid is the ZenWatch manager option to keep your phone unlocked when the watch is on your wrist (typically) or nearby. Not only does this feature result in a significant battery drain, it also defeats the purpose of security for the convenience of not having to unlock your phone.

The ZenWatch is thin, stylish, a little sexy and very affordable. Best Buy is where I purchased my **ZenWatch for \$199.95**. In comparison my **Moto 360 was \$250.00 with the leather band and \$300.00** with a metal band.

Moto 360 by Motorola:

I personally have owned the Moto 360 for three months now and it has become my “daily driver.” The Moto 360 is an android watch running the “Google Now” (Android Wear) platform. It was the first smartwatch to come out with a circular display!

MOTO360



Its circular display and narrow bezels make for a stunning first impression. If there is a drawback to the round design- it is the thickness. It is 11.5 mm, making it fairly obvious to anyone that it's not your typical wristwatch. However, in all fairness- there are many large regular watches in the market place which would be similar to the Moto 360's girth. The Moto display is "round" but not all of the round form factor is used for its display. There is a small cutout section (pretty much un-noticeable to a casual observer) that has a little silver cutout with seemingly no real purpose.

The Moto 360 has a beautifully crafted stainless steel body with a quality leather band. I originally chose the black body Moto 360 with a black band. However, after only a few days of wearing it, I felt it resembled a "black hockey puck" on my wrist. I returned the smartwatch to BestBuy and replaced it with the stainless steel bezel and the rose/beige (they call it stone) leather band. It makes a striking combination with a suit! The watchband can be replaced with any standard 22mm watch band.

The Moto 360 uses all of its circular screen (except the small part previously mentioned) to provide a script, large and vivid display. It's very readable at even the casual glance. Since its launch in late 2014, the Moto 360 has received updates which have improved its battery life considerably. However, it still lags behind if you choose to have the smartwatch in "always on- watch face display." In this mode, the

Moto 360 drops from 8-10% of its battery life per hour. This results in the smartwatch not making it through a typical lawyer's day- and certainly unacceptable. Yet, with the screen brightness dimmed to 3 out of 5; and with the "always on" disabled- my Moto 360 only dropped 3-5% per hour maximum. After a 12 hour workday, I typically would have somewhere in the vicinity of 65% battery left. I have squeezed two days in this mode without charging. Keep in mind that even with the "always on" ambient mode off, every time you raise your wrist to look at the time, the smartwatch wakes up to accommodate you. It also comes to life with each programmed notification, email, SMS, etc. You can also merely touch the watch screen with your finger and wake it up. Even with all these notifications etc., I still use only 35% battery in a typical day.

The Moto 360 has the typical heart rate tracker, step counter and all of those neat health functions that come with the "Google Now" Android Wear platform.

For me, the Moto 360 is a much more normal "feel" of a watch than any of its square or rectangular competitors in the wearable arena. The Moto 360 cost \$250.00, with a leather band and \$300.00 with a steel band.

Samsung Gear 2

In the non "Google Now" Android Wear operating system arena, my favorite is the Gear 2 "Tizen (Samsung) proprietary operating system. Samsung's initial try at building a smartwatch for the masses is "the original Samsung Galaxy Gear Smartwatch was the first out of the gate but not a huge success. It has been reported that this attempt gave Samsung a 70% market share in this emerging market. This figure may be somewhat misleading given the still small global penetration of the Smartwatch. Yet, only several months after the Gear's launch; Samsung listened to its purchasers and came out with a new improved version called the "Samsung Gear 2".



GEAR 2

The Gear 2 has seemingly only minor esthetic changes to the original Gear (1) - at least to the naked eye. The smartwatch (Gear 2) is slightly thinner, with the power/home button moved from the side of the watch to the bottom center. The most notable visible change is the microphone and speaker (to make and receive calls and play your media) was moved from the large clasp on the Original Gear- now being incorporated into the watch body itself. The big change came internally. The Original Gear had run a version of the Android Operating System. For some time now, Samsung had been rumored to be working on its own Operating System called "Tizen." Tizen is basically a mobile spinoff of the Linux Operating System. For years, Linux was an open source alternative to Windows or Apple operating system.

I picked up my Gear 2 smartwatch from my friends at the local Sprint Store in Appleton, WI. The textured plastic watch band with brushed metal hardware is adjustable to all size wrists- which is the first call to action. As I had also owned the original Gear, my first impression was the speed that the Gear 2 powered up. The Tizen operating system seemed to get rid of much of the latency found in the original Gear (1). Tizen operating system has been criticized by many in the media. "Tech News Today" daily podcast (my personal favorite podcast) on TWIT, host Mike Elgan, stated, "That it was not believed that the Tizen system would be successful due to a lack of developers or App Store for such a closed market (Samsung only) system." Many in the know seem to think that Samsung, given its huge worldwide market share in the Smartphone and Smartwatch market- wants to break away from Google and the Android operating system. I'm not sure how this will pan out, but I can certainly say that the Tizen system is "snappy" on my Gear 2. If that is any indication, Tizen (as an operating system) may have a promising future; even if limited to wearable devices.

The Gear 2 has a camera built in the top side bezel of the smartwatch. This is a marked improvement from the Gear 1- which had the camera built in the watch band (making it look way to obvious and unattractive from a watch standpoint). The camera takes reasonably good pics and limited videos. You will likely still want to pull out your smartphone and use the much higher quality camera therein contained. The telephone features of the Gear 2, (now built into the watch body itself) are really very nice and work well with good audio quality. Your contacts and phone log are easily available also on the smartwatch. A voice memo application and television remote are two helpful applications. The health applications are really where the Gear 2 shines. You can easily monitor your walking or running, your exercise, your heart rate (at any given time), and even your sleep (for restlessness duration during the sleep period). Applications include: weather, timer, "feedly"- for news feeds of interest, and a nice calendar and to-do application called "EasilyDo." Battery life seems to be extended with the Tizen system (and its better battery conservation). You should easily be able to get two days wear (with heavy use) before recharge. However, I have gotten into the habit of merely charging the watch, when I retire for bed; so battery life has not been an issue for me.

The Gear 2 has a growing App Store of helpful applications with everything from Social Media to business/finance. Given that Samsung must be serious about the Tizen platform; they have offered some nice incentives for developers to develop for this platform. It likely will never become anywhere near the size of the Google Play store. However, given that a "Smartwatch" really only is meant to do a small number of things well, it should be just fine!

The time and next appointment feature on the watch face- is a key tool for me. I can merely glance at the watch face, and not have to pull out my Smartphone to view. The phone features are nice, but I believe have limited real world application. The voice recorder can certainly be helpful to an Attorney needing to document a client interview or conversation (naturally with the knowledge that you're recording). The notifications are another area where the Gear 2 really shines. Email, posts, messages, texts, etc., can easily be read right on the Smartwatch, after you're notified of their receipt. I initially thought this might have limited use for me; however, I find that I regularly read these on the Smartwatch now- instead of pulling out my Smartphone (which is typically in my pocket or briefcase) particularly while in court. On the downside, the Gear 2 has a limit to what it will display from a text, email, SMS, etc. At that point it directs you to open the application on the phone. Sadly, I believe that greatly diminishes the smartphone's usefulness!

Is Tizen the answer for Samsung?

Apparently not, as Samsung has come out the Gear Live (running the "Google Now" Android Wear operating system).

GEAR LIVE (approx. \$200.00)



It does not come with a camera on it or the ability to answer your calls on your watch (Dick Tracy/Maxwell Smart style) as the Gear 2 does (as well as the Gear S).

GEAR S (approx. \$350.00)



If an independent smartwatch/phone (which does not need to tether to your smartphone) is what you desire- Samsung has come out with the Gear S. I have tried on the Gear S. and for me, while the screen is a large, wrapping curved rectangle- it's just too big for my taste. However, it is a very stylish smartwatch/phone. At least for me, I also do not find the need for a smartwatch, with its own sim card; separate data plan and bill with the carrier of choice; therefore, the ability to work independently of a smartphone! Beware though; you will need a Samsung phone to setup the watch before you can divorce it from the phone forever (if you so choose). The real life advantage which I can see to the Gear S would be for runners or those fitness fanatics, who prefer to leave their smartphone at home during a run or in their gym locker while working out.

Samsung learned from the original Gear, and came out with some nice improvements in the Gear 2. As a criminal attorney, time management and convenience helping me to cope with my day (schedule in court); the features that I have outlined definitely make the Gear 2 as a worthwhile purchase. These features while certainly convenience orientated, and not overly numerous in amount; give an Attorney just that extra bit of ease in what he/she does. And folks, isn't making your life on a daily basis, to go more smoothly- worth a few hundred dollar investment. While release dates of competitive smartwatch products such as the Moto 360 (rumored to be using the Google Card new mobile operating system), LG's attempt at a Smartwatch and the Apple Watch- none of them yet having been released to market or with firm release dates; it appears that at least for now that the Gear 2 may be one of the best choices for Smartwatch users.

For those of you who even look farther into the future, Samsung had its Tizen Developers Conference 2014 this week. Samsung is developing a smart home powered by Tizen operating system. It will have the ability to control most of the electronic devices powered also by Tizen O.S., inside your home. At the Tizen Developers Conference 2014, Samsung demoed a home packed with devices running the Tizen Smart Home. Tizen will ultimately control multiple device inside your home, from your smart TV, air conditioning, to your vacuum cleaner and lights. In the demo, the Gear 2 Smartwatch, with just the voice command "I'm going Out" being spoken to it- had the smart home then automatically turn off the lights, and other smart devices inside the home. When your return, you speak into your Gear 2 smartwatch "I'm home" and devices that have been set to turn on will –TURN ON! NOW THAT IS REALLY USING YOUR SMARTWATCH TO ITS FULLEST CAPACITY!

Apple Watch (or whatever it is ultimately called)

*As it is not officially launched, all we can go by (with regard to actual looks is what was presented at the Apple keynote announcing the watch by Tim Cook. Forrester Research predicts that Apple could sell 10 million units of the Apple Watch in 2015. Morgan Stanley is more bullish on the Apple Watch sales predicting anywhere from 30- 60 million units its first sales year. It is believed that the starting price in the U.S will be \$349.00, and spiraling upwards depending on how fancy you want to get. Stay tuned. The smartwatch is rumored to launch in late March 2015. We hope to have the smartwatch at our live presentation. This beautiful, stylish and fully functional watch is bound to be a huge hit!

APPLE WATCH



IN SUMMARY:

As a practicing criminal defense attorney, I find a smartwatch a wonderful investment; particularly given the fact that I use an Android Phablet. I use the Samsung Note Edge, which I typically either put in my suit coat vest pocket or wear with my Seido clasp attaching it to my belt on the left front side of my

slacks. Before the smartwatch, I found myself with the smartphone in my hand most of the time. I use my smartphone for everything from calendaring, word document preparation on the go, notifications, reading emails, SMS texts (which I receive from clients all day long- which I encourage to stay connected with them), keeping up with the news and sports, and even an occasional game to break things up. With my smartwatch, running the Google Now operating system- I can basically do the vast majority of these functions, without physically having the phone in my hand and in front of me.

In court, I find the notifications feature the most useful. At a glance- I can see what court appearance or appointment I have next. Another favorite feature is reading my SMS texts on my watch. And, if it's appropriate - I can merely speak my reply to "my watch" and it will transpose the message and send it for me. Some of the smartwatches like the Samsung Gear 2 and the Gear S (which has its own independent from the phone radio receiver) are able to make and receive phone calls. I suppose that feature would be useful at times, however for me- it really is not important. While I love tech- I don't find it particularly useful carrying on a phone conversation with your watch face. You don't have the privacy you might want with a client- when you are out in public! Although I guess if you're really out to "get attention"- speaking into your watch like Dick Tracy did so many years ago, is certainly the way to do it.

The smartwatches of today incorporate some pretty amazing technology. Aside from their assistance to you in court or in your everyday practice; there are many health functions which they monitor. They can monitor your sleep and sleep habits; count your daily steps to see how active you are (and even vibrate to remind you to get up and move around) ; monitor your heart rate and keep records of it; track your running-walking-cycling-hiking and keep records of your exercise history. It seems as if each individual smartwatch manufacturer, no matter what operating system they incorporate in their product, tweaks the systems with a few new features (often related to health monitoring). How much you use all of these functions naturally depends how active you are, how much time you have to invest into the tracking (or remember to track it), and how invested you are into exercise and well-being. Think of it this way- your smartphone has so many different useful functions that most of us typically use the device to only a small portion of its potential. However, the functions are there if we need them. A smartwatch is a smaller brother/sister of your smartphone that sits on your wrist. A minicomputer on your wrist! It does not do everything that your smartphone does. Its purpose is to free you up from having to pull out your smartphone every time you need some basic information, need to be notified or need to compose say a brief response to an email- text- or notification.

Each and every lawyer who decides to delve into the world of wearable computing (smartwatches being the focus of this paper), will find new and exciting uses for the wearable device in his/her practice. Each of us has different goals for how the smartwatch can hopefully help us simply what we do daily. There are basically only a few operating systems used at present in wearable smartwatches. The main player in my mind is the "Google Now" sometimes called the Google Cards operating system. Samsung uses this system, while also having their own Tizen operating system. At CES 2015- LG and Audi introduced their smartwatch using the "Open WebOS" operating system. And finally Apple, by the time of Tech Show 2015- should have launched their "Apple Watch" or whatever it ultimately is called with most likely a mobile ios operating system. Each operating system has their strengths and faults and for me- it ultimately comes down to the smartwatch that will operate with your smartphone (which for most

every smartwatch is the brains); and then it comes down to personal taste for the look and feel of the particular smartwatch. Personally, I tend to gravitate to the round smartwatches like the Moto260- as they resemble a “normal wrist-watch”. However, there are some very stylish square and oblong smartwatches out there which are also great choices. As of this writing, we know very little about the Apple watch or let’s call it, the “iwatch.” We do know that there have been reported to be 3,000 prototypes out in the wild, for everyday – real world testing. It will be a handsome, well-made time piece- up to the exacting quality of all Apple products. It appears that it will have a square face, but naturally this could change by launch. From what has been leaked, it seems that it will be able to run a vast majority of your iphone resident applications- right on your wrist. Now, how seamless that process will be, and how much battery life that will drain from the unit, will ultimately reflect the Apple smartwatches “grades” and desirability. However, I read today that Apple could be the first company to ever reach 1 trillion dollars in assets. Apple is a success story like no other! So I suspect that even an iwatch with a somewhat limited battery life will still be a huge hit!

Security is always a concern for any lawyer. Much has been written and debated about security since the Snowden leaks of NSA documents and more recently the Hack of Sony. There are a number of different security programs available for your smartphone. I use AVG., however, there are many other options. Every lawyer should use some form of security program. Whichever program you choose will affect the data migrated from your smartwatch (as in most cases- the smartphone is the brains running the show). However, at this point in time there are no specific programs developed “just for smartwatches”. The smartwatch talks to your smartphone via Bluetooth- to get the data your request.

Style: Style is a very personal preference and will have a big impact on which smartwatch you choose. You need to check each on out to see which smartwatch best suits YOU! As of this writing the major players are:

- *Apple (although the smartwatch has yet to be released)
- *Samsung
- *LG
- *Motorola
- *Martian
- *Sony
- *Asus
- *Pebble

Runner ups

- *Cogito
- *Garmin
- *Alcatel
- *Will.I.Am & Nuance PULS Smartband

Just about every manufacturer nowadays is going to interchangeable bands, therefore if the smartwatch does not come with a band of your liking- you should be able to easily get a leather or metal replacement band.

Is a Smartwatch useful to a Lawyer?

Let's ask the question, do you at times become annoyed with always having to pull out your smartwatch to check your calendar, see your next appointment, check a to-do, see a notification, check a notification or email, send a brief response to an email or SMS text from a client? If you answered yes to any of these- then you are a good candidate for a smartwatch. Just about any and all smartwatches will these functions and often much more!

Will I be considered a Nerd if I wear a Smartwatch?

Do you really care? It's really all about making your job and life easier. Anything that can help me do my job better and streamline my practice with- I'm on board with! Naturally, tracking my health and helping to keep me healthy is just a BONUS! How many times have you been in court and noticed other attorneys "checking their smartphone" in one hand, while perhaps juggling a client file in the other hand? Not surprisingly- I am constantly asked by those same attorneys to "show them my smartwatch and how it works." If that classifies me as a "NERD," "DICK TRACY" or "MAXWELL SMART," then so be it!

What the future holds?

You are able to do so many great and innovative things with your smartwatch already. Yet at CES 2015, LG and Audi teamed up to on a yet unnamed smartwatch that will run WebOS. A demo by Audi showed how the smartwatch when NFC-paired with the new Audi S7 could remotely unlock the car with a tap. Many manufacturers already have applications that will allow your smartwatch to work as a remote TV controller. If you love taking pictures with your DSLR and tripod, you can remote fire the camera with your phone. With the internet of things- controlling you home appliances and security system with your smartwatch is on the horizon. The possibilities are limitless!

Should I buy a Smartwatch now or wait?

Certainly the wearable field is ever-changing, almost on a daily basis. Someone once told me, when purchasing a computer, "it will likely be somewhat outdated a few short weeks after you purchase it." Technology doesn't wait for anyone. The same person did say "buy the best computer that you can, with all the bells and whistles on it that you want, now and don't worry about the changing environment." The theory was that buying the best that you can afford, with the features that are important to you- will likely result in your purchase standing the foreseeable changes and being current for the near future! I believe the same theory is applicable to smartwatches. The technology is new and ever evolving. It seems that manufacturers are aware that purchasers aren't going to be changing their "smartwatches" every year or two. Therefore, while a particular smartwatch might get a "bit slimmer" or might have "better battery life," the manufacturer and operating system supplier (i.e. Google, Apple, and Samsung) should strive to keep the watch updated with the most current operating system. This strategy should keep your smartwatch current. My advice is to jump into the smartwatch arena and buy the one that best suits your needs and style – NOW! You won't be sorry. Enjoy!

Fashion Do's and Don'ts – How Will Wearable Tech Work in Your Law Practice

Submission by Rick Georges

Wearable Computing. Will The Lawyer Of The Future Wear Her Devices?

I am mystified by the current flap over professionals and wearable computers. It reminds me of the time, many years ago, when, at a Bar meeting in which I was discussing the bright future of email, one of the participants actually said: "I will not use email. I have a Quill Pen, and I am proud of it." Yikes. I suppose that lawyer is now out of business, since you can't practice law in Florida anymore without an email account. So, why is it so strange that I wear a SmartWatch and a Bluetooth headset? My wearables make me more productive and efficient. I really don't care if it looks geeky or uncool. What, are we in high school? Guess what? If you have ever put a smartphone in your pocket, you are "wearing" your computer. If you have ever put a bluetooth headset on to listen to music or talk on the phone, you are "wearing" your computer. In fact, you have been "wearing" a piece of tech for many years if you "wear" a wristwatch. Why is it a problem that my watch performs more functions than yours? Why is it a problem that my watch looks different? Jeez. By the way, the next stop on the wearable computer highway? Smartrings.

All of this begs the question: how will wearable computing devices enhance the way lawyers practice law. Imagine having a cup of coffee in a restaurant in a strange city. Your Smart Watch vibrates and you look down at it. It shows a call coming in from a number you recognize as local to your office. You pick up the phone and it is the office of an opposing lawyer, with a request for information about a pending matter. You power up your tablet or notebook computer, and access your files either on the computer or on the Internet. Then, you obtain some information about the case from the progress docket at your local Clerk of Court's office. You are speaking on the phone with the opposing law office using a bluetooth headset draped around your neck like a necklace. This actually happened to me in January at CES in Las Vegas. You may be a fashion statement; but, you are practicing law anywhere you like. In fact, why do you have a physical office anyway?

There are plenty of examples of wearable technology that is enhancing professional and personal life today. Smartwatches, for example, have many functions beyond giving the time and the date. Modern Smartwatches can do a lot of amazing things. Mine can keep track of my heart rate, count the number of steps I walk during the day, measure carbohydrate and calorie content of food, create a nutrition plan, and much more. The FDA, however, appears to draw the line at providing medical functions and claims to treat disease, however, and intends to regulate such devices. I don't like the newer devices that intrude on my life, and make suggestions about health and fitness. I do appreciate the notifications about things that I want to know. Can you think of ways that a SmartWatch can keep your day more efficient? How about not having to find your phone or computer every time you get an email or a text? How about a gentle vibration on your wrist letting you know that an email or text is coming in? How about being in the car and being able to answer the call while your hands are on the wheel, with your voice? Even SmartWatches are acquiring more capability. My preferred SmartWatch is the Samsung Gear S, which has a large curved screen making it possible to actually read texts and emails on the watch. It can be controlled by voice, and I can take calls, reject calls, and do searches without touching the watch. Best of all, however, it contains a 3G SIM card which, for a small monthly fee, can make calls on its own number. If I walk more than 30 feet away from my office, any calls are forwarded

automatically to the watch. Since the phone is in a charging cradle while I am in the office, this is a great enhancement. In addition, it gives me a great way to keep track of the phone.

Virtual reality is another tech trend that will have impact on the legal profession. These computers in a pair of glasses will replace your computer, your smartphone, and your smartwatch,; and, one day, everyone in the courtroom will be wearing them. Holographic images will supplement these virtual reality headsets; and, ultimately, we will be able to view any computer image in all dimensions. Project Hololens by Microsoft is already at the test stage, and will change everything. Right now, however, I own and am using the Innovator Edition of Samsung's VR headset, which can be purchased for \$199 in the Samsung store. It uses my Galaxy Note 4 SmartPhone as a brain and screen, and snaps into the headset. Once worn, the headset immediately transports you into a 360 degree virtual universe. You can sit in a virtual theater and watch your video content on a movie sized screen. You can swim with dolphins and sharks. You can fly anywhere in the world with a bird's eye view. How will this translate to the practice of law? Someday, you could actually have a trial or hearing online, and everyone in the courtroom would be wearing these, and actually be in different physical locations.

We couldn't have a discussion of wearable computers without discussing the analogy to jewelry. There are many ways in which designers are mimicking jewelry in their tech gadgets. For instance, after trying many Bluetooth headsets, some of which wrapped around the ear, some being inserted in the ear all day, and so forth, I have opted for a necklace. There, I said it. I don't wear it as a fashion statement, though. I wear an LG bluetooth headset that is so light I forget I have it on. It allows me to take calls without having an uncomfortable ear set in my ear all the time. When a call comes in, the necklace vibrates gently, and I can then glance at the watch to see who is calling. If I take the call, I can do it with my voice on the watch, or, I can retract an ear bud, and press a button on the LG necklace to take the call privately. Many lawyers are already using this staple of wearable computing, which greatly increases efficiency in staying in touch during the day. For the solo practitioner, all calls can be forwarded to the Smartphone, which, if unanswered, can forward the calls to the SmartWatch, and can be taken on the necklace headset. As long as it is draped around my neck and the watch is on my wrist, I could be anywhere on the planet with cell service and take my office calls.

Every time I have read a negative article about wearable computing, or had a negative comment (you know who you are) I have been amazed at how little we realize that we have been wearing computers for a while now. As an example, for a couple of years my family has been putting on rubber wristbands called Magic Bands for our trips to Disney World. We go often, since Disney is a world class vacation destination just outside our front door (about an hour and a half away). Magic Bands contain unique codes that are programmable via computer, and allow us to access everything Disney without a wallet or a credit card. There have, for some time, been fitness bands that measure physical activity, and many of us have purchased and used. In fact, if you have and use a SmartPhone, and you all do, you have been "wearing" your computer for some time. You may wear it in your pockets, or on your belt, or carry it in your hand. But, you are "wearing" it, nonetheless.

The Future of Wearables Isn't a Connected Watch. I disagree with Matt Honan about the utility,

or lack thereof, of connected wearables. He has a drawer full of early devices that he never recharged because they only did what he could do with his phone. However, I love the fact that I don't have to pull out my phone to take calls anymore, or to know when I have a text, email, or other notification. I can choose to find and take out the phone, or I can just continue on. Where I agree with Mr. Honan is in the future of wearables. Ultimately, wearables will be invisible. They will be incorporated in just about everything we wear or touch, and will do one thing well. His examples of medical monitoring devices, and haptic feedback gloves are spot on. Connected wearables are only going to proliferate, however, until we can figure out a way to implant them in our heads.

In fact, wearables will ultimately become implantables, and they will augment our lives and our reality in a big way. Those who are the weakest, sickest and frailest among us will be the biggest beneficiary of this new technology. Scientist's use of augmented reality glasses to aid the legally blind is the best current example. The pursuit of augmented reality isn't just for fun, and I have always attempted to apply what I have learned about wearable computing devices to my life and to my profession. There is a whole galaxy of reasons why this technology is important; and, it begins with human frailty and the aging human body. As we grow older, our eyes slowly lose their effectiveness, and, in many, virtual blindness is the result. Now, using specially equipped Epson Movio Glasses, the blind are able to distinguish and identify shapes, and much more. The future is bright for SmartGlass technology.

Much is being written, these days, about the Internet of Things...a world in which everything, including the clothes we wear will have a Bluetooth enabled chip that serves a specific function. Kitchen and Home Appliances, lamps, just about everything is being connected. Some even predict the end of the Internet as we know it; because everything will be connected to everything else. As an example, one of the newest areas of connectivity and wearables are button sized cameras that can actually replace buttons on clothing. These devices become more than wearable or jewelry; they are actually being made part of our bodies. Let's face it. Body piercing for decoration inspires fierce disagreement. Some hate it and some love it. In the future, however, wearable computer sensors will be a part of many of us, and will enhance, or merely copy, human senses. Who would deny Color-Blind Man a wearable sensor that translates color into sound, and enables him to see the world in color again? Oh, did I say that he is an artist? Who would deny a person a sensor that enhanced lost hearing, sight, taste or touch? So, call yourself a Cyborg, or just an enhanced human being, technology and computers will be a part of all of us in the not too distant future. They are already conquering disability.

Of course, all of this fantastic tech doesn't come without risk. As we become more connected by our wearable devices, lawyers need to consider the risks and security of client confidential data that is carried in the devices. Bluetooth technology, like the Internet and all wireless communication, can be hacked, listened to, and information stolen. Be assured that very bright engineers are working every day on encryption, and other security measures to control access to the information. However, like my lawyer in the beginning of this paper, who refused to use email, there will be no stopping this avalanche of tech progress. It remains for us to be diligent in protecting the information that we pass along. Just as there always was a risk of talking about client confidences with the client on a telephone with a wire that could be tapped, there is risk in

speaking confidentially over a SmartPhone. The fact that a determined criminal could steal information doesn't mean that we can't use the technology. It means that we must take all reasonable steps to protect the communication given the current state of the technology. It means that every lawyer has an obligation to learn about the new technology and to understand it, so that he or she can protect client confidences.

At the end of the day, like email, lawyers will need to learn to use and adopt ever wearable computing devices in order to compete. This development, along with the "Internet of things" will envelop the practice of law as well. Many "things" and devices in the future will carry bluetooth transceivers, and will "talk" to other "things" and devices. Right now, my smartphone talks to my bluetooth headset, and my smartwatch. All of these devices can exchange data with my tablet computer. In or out of the courtroom, the Internet and all of my contacts and colleagues are, and will be, connected with me in a functional way. As my favorite football coach, George Allen, used to say: "The Future is now".