Emerging Technologies Lead to New Discovery Opportunities
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The time is quickly approaching that demands we rethink the way we conduct discovery once again. The changes are more subtle this time versus the last (when we went from paper to digital discovery), but they will add to both the complexity and the opportunity of discovery in your cases and you need to prepare.

Let’s start by looking at two major changes in technology happening now.

Major Tech Change #1: The 5G Network
The first change is the advent and widespread distribution of the 5G network. By creating a nationwide high-speed and mobile data network, there will essentially be a Google Fiber connection floating through the airwaves around most American cities. Verizon Wireless alone will have active 5G in the top 60 U.S. markets by January 2021. This will allow constant high-speed connectivity throughout most of our country, something previously reserved for only our home or work Wi-Fi networks.

Major Tech Change #2: The Internet of Things
The second major change is the internet of things, or IOT, and the quickly exploding world of internet connected devices. When addressing electronically stored information (ESI) in the course of discovery, it’s not just about emails and Microsoft Office documents anymore.

Most of us have a growing list of these smart devices around our homes and offices already, things like:

- Smart TVs
- Smart watches
- Smart assistants
- Smart cars
- Smart refrigerators
- Smart lightbulbs
- Smart sprinkler systems
- And the list goes on

When combined with the 5G network, these devices will be able to send and receive updates in real-time, no matter their location. This will create an objective record of most things in our daily life, and mountains of data about our lives that are easily accessible and always available.

Each of your cases has a data lake.
In fact, there’s a name for the data we collect from all of these devices and sources: a data lake. Whether you know it or not, each of your cases has a data lake. The sources may have been only hard copy documents, emails and text messages a few years ago. Now the lake is quickly growing wider and deeper to include:

- Social media data
- Messenger apps
- Business tools
- Security camera footage
- Voice messages
- Key card data
- Geolocation information
- IOT device data

The problem is how do we review all of the data contained in this lake?

Historically, the short answer has been: “kind of patchwork”, depending on the software platforms you have available to you. Traditional databases like Relativity, Summation or CloudNine are great and powerful tools, but the pace of innovation with data sources is seemingly outpacing our traditional web review platform’s ability to present these various sources of data seamlessly.

Their shortcoming in this instance is that they are all relational databases that tie together information (metadata) to a document (native file or PDF/TIFF). With all of the new sources in our data lake, oftentimes these traditional databases cannot display and search all of these sources in the same database.

Many of the newer data sources do not have documents or native files available and are instead “event” based. This means that each time you open your smart refrigerator door, the action is logged as an event but there is no document or file associated with it, simply an entry in a log file.

Typically, the task of reviewing these events and log files, alongside more traditional data, calls for quite a bit of manual work and software workarounds to make it all available for review in one place.

**Emerging technology is bringing the data together.** The legal technology sector is starting to introduce solutions to this problem, and they are powerful. One emerging technology we’re really impressed with, and who we’ve recently partnered with, is ESI Analyst.

ESI Analyst is an eDiscovery tool that helps attorneys tell the entire case story by combining multiple sources of digital evidence, including event-based log entries, in a single platform. ESI
Analyst powers timelines, charts, reports, review, and production of multiple forms of modern electronic evidence at an affordable price point.

Let’s look at two real-life scenarios that have been historically difficult, but that will soon be commonplace thanks to ESI Analyst’s capabilities.

**Scenario 1: Reviewing WhatsApp Data**

During custodian interviews, you and your client realize that some of the key custodians have been using alternative communications methods. Specifically, WhatsApp. You need to collect, review and produce all responsive, non-privileged WhatsApp data.

Traditional review databases (CloudNine, Relativity, Summation) are fantastic for the organization and review of common data sources: emails, Microsoft Office documents, file shares and the like. Non-traditional sources of data can be ingested into these databases, but it often requires custom development to make everything work correctly.

WhatsApp is a fully encrypted cross-platform messaging and VoIP service owned by Facebook. It allows users to send text and voice messages, make video and voice calls, and share pictures/videos/files. WhatsApp is accessible from Windows and Mac desktop computers and any mobile device. Given the multitude of documents and data WhatsApp can share, it is a tall task to fully integrate it with most review platforms. What’s more, WhatsApp data is now involved in more cases than not.

**ESI Analyst can easily display WhatsApp and other messaging data.**

The good news: ESI Analyst is uniquely positioned to accommodate the review and analysis of WhatsApp data, as well as other similar collaborative messaging tools.

The secret to ESI Analyst’s ability to easily display all of this data automatically within their platform is that it treats each message or file as an “item”, and common communications between participants as a “thread”, not as documents. This allows us to collect multiple devices from the same user and programmatically deduplicate data from one device against another. The end result being a collection of unique data from WhatsApp that is nonduplicative and inclusive.

ESI Analyst also displays each conversation in a more familiar way where messages, pictures and videos all display in the order they were sent/received and not separated by type, as happens with traditional methods.

All of these factors make reviewing WhatsApp data extremely powerful. Resulting data can be tagged and exported for further review (and can be integrated into CloudNine or Relativity databases) or can be directly produced out of ESI Analyst.

**Scenario 2: Proving Geolocation at a Specific Time**
A local car dealer (Car Dealership A) is accused of defamation against his cross-town rival (Car Dealership B). The accusations in the case include:

- Paying a Philippines-based company to produce fraudulent negative reviews on his competitor’s website
- The owner of the defendant car dealership being personally accused of leaving fake negative reviews by accessing unwitting customer’s phones

In this case, the data is going to tell the truth if we can acquire it and understand it. We know that there were several dozen online reviews that appear to be fraudulent. Out of those several dozen, most are tied to an IP address in the Philippines. Although the IP addresses made it obvious that they weren’t real customer reviews, it wasn’t enough evidence to prove who purchased the false reviews. A couple of ignored 3rd party subpoenas later, and this case appeared to be dead in the water.

At this point, we decided to look at the other negative reviews on Dealership B’s website and see if we could tie them to an actual customer. There were a handful of reviews that were flagged as possibly suspicious and the case team went to work trying to contact the non-customers who left negative reviews. Luckily enough, we found a person who was willing to help us solve this puzzle. As it turns out, one of the customers who left a bad review at Car Dealership B was an actual customer of Car Dealership A. When she was finishing her negotiation, she was offered an additional $500 discount if she would leave a positive review for Car Dealership A. When she was finishing her negotiation, she was offered an additional $500 discount if she would leave a positive review for Car Dealership A. The owner was very specific about what she had to say and told her if she didn’t do it exactly word-for-word as he said, the discount would be rescinded. Instead of losing the $500 discount, the customer simply handed her phone over to him as he offered to simply type it for her. The owner then proceeded to leave a negative review for rival Dealership B from the woman’s cell phone as well as a positive review for his own dealership.

This is great news for the case team but now comes the hard part: how do we prove it? While there are dozens of options to review emails and the like, how do you prove where mobile reviews were posted from (geolocation) and how do we explain this in court using only longitude and latitude numbers? This real-life scenario perhaps plays out in court when cell phone location data is needed. It sometimes takes a full day to instruct the jury as to how cell phone triangulation works and then to show the data and explain, in longitude/latitude numbers, where the subject was located. It is confusing and frustrating but must be done in some cases. Luckily for Car Dealership B, ESI Analyst was now available.

**ESI Analyst can show the mapped location of a device at a specific time on a single screen.** By utilizing the location history of the mobile device and the “item” logging architecture of ESI Analyst, we were able to demonstrate that at the exact moment that the negative review was being posted on Car Dealership B’s website, the phone was physically located at Dealership A. We were able to show, on one single screen, the mapped location of the cell phone at the moment the review was posted. This proved that the...
customer’s phone was physically located at Dealership A at the precise time the negative review for Dealership B was posted.

**These emerging technologies create a discovery opportunity for attorneys on both sides of a case.**
Change is coming in the eDiscovery world, in the form of data lakes, IOT, 5G, and advances in how we can search and display data.

What type of modern data will be available for your cases and how do you use that data to help win more cases? Depending on your practice and your clientele, the answers will vary. The first step in preparing for the future is to consider the type of data points that are starting to become available and to find a way to use that data to help prove your case. With the right tools in place, you can leverage these new discovery opportunities and strengthen your cases.

**Meet Jeff Dreiling, Co-Founder, Complete Legal**

Jeff Dreiling is the Co-Founder of Complete Legal, a boutique and customized eDiscovery provider. Complete Legal serves a wide variety of clients, from solo attorneys to large corporate firms, providing a competitive advantage throughout the lifecycle of their legal matters. Jeff’s 17 years in the legal support industry include a multitude of experiences consulting, speaking, and writing on eDiscovery and ESI for hundreds of clients. Learn more at completelegalkc.com.