How to Build a Smoking Gun

Imagine that you had access to an insider in a fraud case who could not be cross-examined and that this insider could lay out exactly what the defendant told the victims or what the defendant did with the money. You would spend hours and days with that insider, figuring out how to ask the right questions to elicit the information you need and to make things clear to your future jury.

Documents and data can be the equivalent of those potential insiders, and prosecutors and agents should treat them as such. Investing time and resources into analyzing documents and data and turning them into the equivalent of a smoking gun can strengthen cases and even help make them in the first place.

Two examples from the world of journalism (one fictional, one real) show how powerful this kind of work can be.

In the popular thriller *The Girl with The Dragon Tattoo*, the main character (an investigative journalist) is trying to discover what happened to a girl who has been missing for decades. Witnesses provide little help, some due to limits in their knowledge, some due to hidden agendas.

One big break in the case comes when the journalist goes to the local paper and discovers archived photos from a parade that the missing girl attended on the day that she disappeared. Each photo, in and of itself, is meaningless, just noise. But then the journalist does something with the photos. He takes all of the photos, scans them, and puts them into a chronological sequence focused on the missing girl.

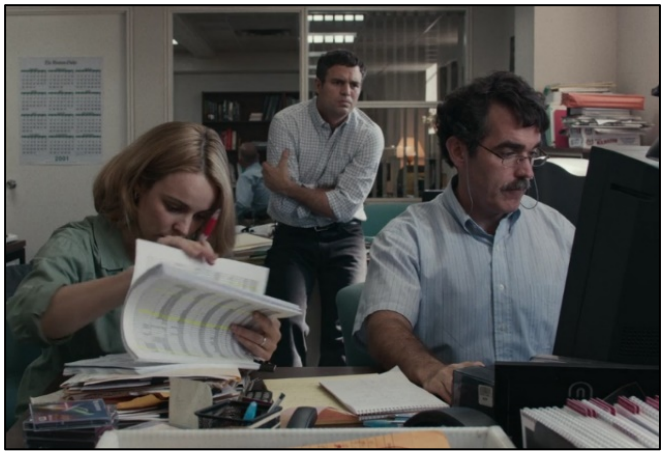
Still from the Swedish-language version of *The Girl with the Dragon Tattoo*

The resulting sequence shows the girl enjoying a parade, and then it shows her reacting with shock and horror when she sees something on the other side of the street. Something happened at that parade that changed everything. Something that turns out to be a key part of the mystery.

Each photo was meaningless on its own, but when aggregated, the overall sequence changed the entire course of the investigation.

In *Spotlight*, the 2015 Oscar-winning movie based on true events, Boston Globe reporters are investigating the sexual abuse scandal within the Catholic Church and focusing on one particular priest who had abused minors. One reporter looks up the priest in the archdiocese's annual directory and realizes that the archdiocese had used a euphemism to refer to the priest's location. The reporters then realize that the archdiocese had been using such euphemisms to refer to other priests, and that the archdiocese had thus left a coded guide of the abuse in its own directories.

A montage sequence ensues of reporters going through directories, climaxing with, of all things, the completion of a spreadsheet.



77	1996	lane	bernard	j	60	sick leave	probable
78							
79							
80							
81							
82	1990	mahan	paul	j	68	unassigned	probable
83	1991	mahan	paul	j	68		probable
84	1992	mahan	paul	j	68		probable
85	1993	mahan	paul	j	68	na	probable
86	1994	mahan	paul	j	68	na	probable
87	1995	mahan	paul	j	68	unassigned	probable
88	1996	mahan	paul	j	68	sick leave	
89							
90							
91							
92							
93	1989	manning	paul	f	67		probable
94	1990	manning	paul	f	67	chapl	probable

Stills from *Spotlight*

Three of the Pulitzer Prize-winning Boston Globe reporters who actually did the work in real life—Walter Robinson, Michael Rezendes and Sacha Pfeiffer—described it as "three and a half weeks of agony" in a telephone interview. To relieve the tedium on the eyes, they sometimes did the work in pairs, with one reporter reading off from a directory and another person entering the data. But it was worth it. The resulting database was invaluable, they said. The work showed that the individual examples they had heard about were not isolated and showed that there was a larger pattern at work.

These fictional and real journalists made these breakthroughs themselves by investing time and resources into taking little bits of information and aggregating them into something that no single witness would have given to them, making them into the equivalent of smoking guns. Prosecutors and agents can achieve similar results by thinking beyond the witnesses they will interview and investing time and resources into aggregating evidence into powerful tools.

I. Rules and Principles

When analyzing and summarizing evidence, you should keep in mind the evidentiary rules allowing for charts at trial, as well as good design principles that should apply to all charts.

Three evidentiary rules provide "multiple options" for attorneys to "summarize complex evidence and bring it to the jury's attention in the form of a chart."[1]

The main rule is Federal Rule of Evidence 1006, under which a party "may use a summary, chart, or calculation to prove the content of voluminous writings, recordings, or photographs that cannot be conveniently examined in court." Under this rule, the government has admitted many different types of summaries, such as phone summaries showing contacts between co-conspirators, analysis of bank records showing financial transactions, compilations of patient files, and timelines.[2] When admitting charts under Rule 1006, the government typically calls a witness who was involved in preparing the chart to explain how the chart was created and to establish the chart's accuracy.[3]

Another rule is Rule 611(a), which allows a district court to "exercise reasonable control over the mode . . . [of] presenting evidence." Summaries admitted under Rule 611(a) are typically considered "pedagogic devices" to "clarify and simplify complex testimony or other information and evidence or to assist counsel in the presentation of argument to the court or jury."[4]

A third rule is Rule 703, which allows an expert to provide the "facts or data" underlying an opinion, which can be presented in the form of a summary chart.[5]

Charts can differ in tone and use based on the rule allowing their introduction. Charts admitted under Rule 1006 are substantive evidence and can go back to a jury for deliberations, and generally should be non-argumentative. Charts allowed under Rule 611(a) or Rule 703 generally may be less neutral in presentation because they are viewed "more akin to argument than evidence."[6] Such charts cannot go back to a jury during deliberations.[7]

Moreover, charts' relationship with the evidence at trial can differ depending on the rules. A chart

[1] United States v. Milkiewicz, 470 F.3d 390, 395 (1st Cir. 2006).

[2] Rule 1006 is typically used to summarize records, but sometimes has been used to summarize testimony that has already been admitted. Courts have generally warned against this practice. *See* United States v. Fullwood, 342 F.3d 409, 414 (5th Cir. 2003) ("we strongly caution, *once again*, against use of summary witnesses in this fashion").

[3] United States v. Fahnbulleh, 752 F.3d 470, 479 (D.C. Cir. 2014) (no error in admitting chart based on testimony by witness who supervised the creation of a summary and reviewed it, even though he did not personally prepare the summary himself), United States v. Shorter, 874 F.3d 969, 978 (7th Cir. 2017) (stating that there is no explicit requirement that a witness testify about a 1006 summary at trial since the proponent of the summary exhibit need only show that the underlying records are accurate and would be admissible). Some courts also refer to 'secondary-evidence summaries' that are a hybrid of summaries admitted under Rule 1006 and pedagogical device summaries. *See* United States v. Bray, 139 F.3d 1104 (6th Cir. 1998). At least one court has referred to Rule 1006 charts as "secondary evidence" of the materials used to create it. *See, e.g.*, United States v. Draiman, 784 F.2d 248, 256 n. 6 (7th Cir. 1986). The case law is arguably not clear as to what the distinction is between a Rule 1006 chart and a "secondary-evidence' chart, but it may relate to instances when the underlying evidence is both admitted at trial as "primary" evidence and summarized in a separate exhibit that constitutes "secondary" evidence.

[4] Bray, 139 F.3d at 1111.

[5] United States v. Janati, 374 F.3d 263, 273 (4th Cir. 2004).

[6] Milkiewicz, 470 F.3d at 398 (internal citation omitted).

[7] United States v. White, 737 F.3d 1121, 1136 (7th Cir. 2013).

admitted under Rule 1006 must summarize evidence that is available to the other party and is admissible, but the underlying records need not be admitted themselves. By contrast, a chart admitted under rule 611(a) should be based on evidence that has already been admitted.[8]

Perhaps appropriately, a table may help summarize the law regarding charts:

Rule	Relationship to Trial Evidence	Nature of Chart	Permissible Tone
1006	Summarize voluminous records that must be admissible and can be admitted, but do not need to be admitted[9]	Substantive evidence, can go to jury during deliberations	Non-argumentative
611(a)	Facilitates presentation and comprehension of evidence already admitted	Demonstrative -cannot go to jury during deliberations	Argumentative
703	Provides facts and data underlying an expert's opinion	Demonstrative -cannot go to jury during deliberations	Argumentative

Law Regarding Charts

Those are the legal rules. However, prosecutors and agents should also consider design principles when thinking about summaries or courtroom presentation, especially given how powerful and common visual summaries have become in regular life.

First, prosecutors should remember that people often learn better when experiencing information in different ways, and that hearing about a fraud is not the same as seeing the fraud for oneself. The Ninth Circuit Jury Trial Improvement Committee noted in 2006 that research had demonstrated that "visual representations can help jurors better understand and remember the facts of the case and should be presented in either electronic or printed form."[10] Similarly, Harvard professor Howard Gardner has advised educators that "[m]astery of a concept or theory requires repeated exposure to that material . . . [b]ut it is a mistake to present the same content in the same way. Understanding is far more likely to be achieved if the student encounters the material in a variety of guises and contexts."[11] Calling witness after witness may be effective, but jurors might learn better if oral testimony is matched with concrete examples and summary charts.

Second, prosecutors should draw upon the lessons imparted by design professionals. Yale professor Edward Tufte has written several excellent books about how data can be summarized via graphs, tables, maps, and other forms of statistical graphics, using real world examples such as how the 1986 Challenger shuttle disaster could have been prevented with a better designed graph. In his book *The Visual Display of Quantitative Information*, he lays out some principles for what good summaries should do: "show the data," "make large data sets coherent," "encourage the eye to compare different pieces of data." Good summaries generally involve "simplicity of design" and "complexity of data." Other good resources include books by Cole Nussbaumer Knaflic, Nathan Yau, Alberto Cairo and Stephen Few.

Prosecutors and agents can apply these rules and principles in simple yet powerful ways to make their cases.

II. Count Something

Whether you are dealing with bank records, emails, or boxes of documents, simply counting and categorizing key pieces of information can answer important questions and yield powerful evidence. In his book, Better: A Surgeon's Notes on Performance, Dr. Atul Gawande suggested that one way of becoming a better doctor was to count something. "If you count something you find interesting, you will learn something interesting."[12] This advice can go far in criminal investigations and trials as well.

[8] White, 737 F.3d at 1135.

[9] Accuracy is obviously important, though perfection is not required. *See* Milkiewicz, 470 F.3d at 399-400 (errors in the underlying records did not render the summary charts inadmissible, in part because defendant had ample opportunity to expose concerns to the jury).

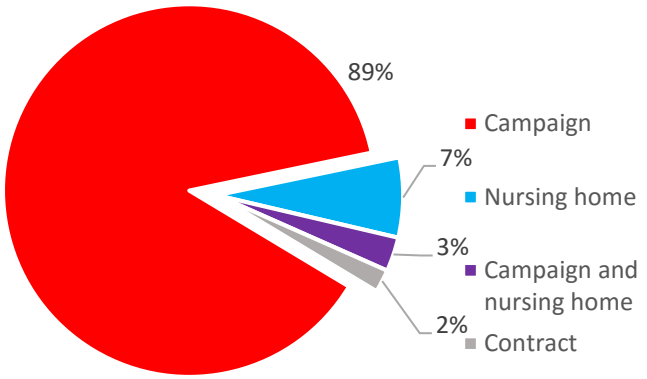
[10] NINTH CIRCUIT JURY TRIAL IMPROVEMENT COMMITTEE, SECOND REPORT: RECOMMENDATIONS AND SUGGESTED BEST PRACTICES, (2006).

[11] HOWARD GARDNER, MULTIPLE INTELLIGENCES: NEW HORIZONS 60 (Basic Books, 2006).

[12] ATUL GAWANDE, BETTER: A SURGEON'S NOTES ON PERFORMANCE (2007).

This was highlighted by a New York Times reporter when reporting on the 2014 trial of former Connecticut Governor John Rowland in the District of Connecticut. In describing the evidence that led to the jury's guilty verdicts, the reporter described the government's summary witness as providing "several powerful punches," simply by categorizing emails and phone records and counting them up.

An issue at trial had been Rowland's contract with a nursing home owned by a cooperating codefendant—was it a legitimate contract for services, or was it really a way to disguise campaign work? The summary witness, who was a retired postal inspector, simply counted all the emails and found that the vast majority related to campaign business and that only a small number related to the nursing home's business. A re-creation of the chart is below:



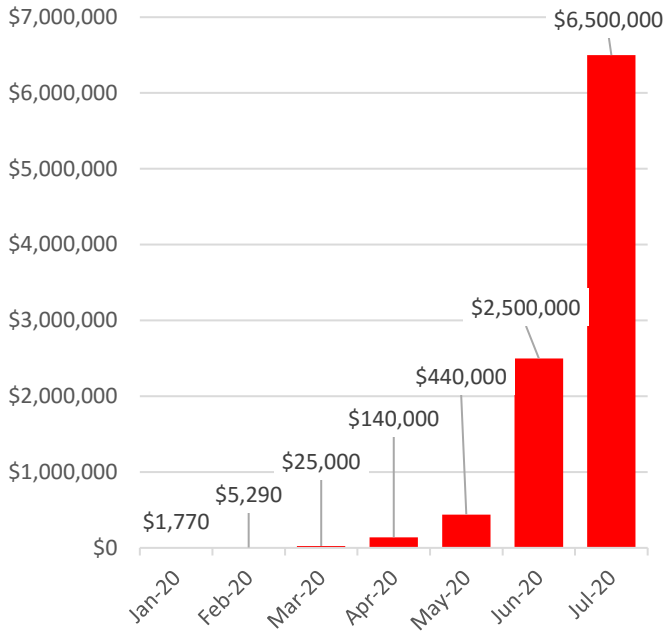
Rowland Emails by Percentage of Files Re Campaign, Nursing Home, Contract

This kind of basic analysis can reveal what defendants are talking about and how often they are communicating. This kind of analysis can also answer important questions in fraud cases, such as where the money is coming from and going to.

For example, in Ponzi scheme cases, analysis of the bank records typically will reveal some common traits: (1) money coming in primarily from new investors, (2) little money actually going out for the kinds of investments that the fraudster had promised, and (3) some kind of disconnect showing how the enterprise's obligations far outstrip the enterprise's actual assets or funds.

That is what happened with Charles Ponzi himself. Ponzi told investors in early 1920 that he could use their money to make huge profits using "international reply coupons" that could be bought at low rates in some countries and worth more in others. He promised fifty percent returns in just months.

The graph below summarizes the amount of money that Ponzi was able to collect from people in 1920 as his scheme suddenly grew. The scheme started off small, but grew rapidly before suddenly collapsing in the summer of 1920.[13]



New Investments With Ponzi By Month

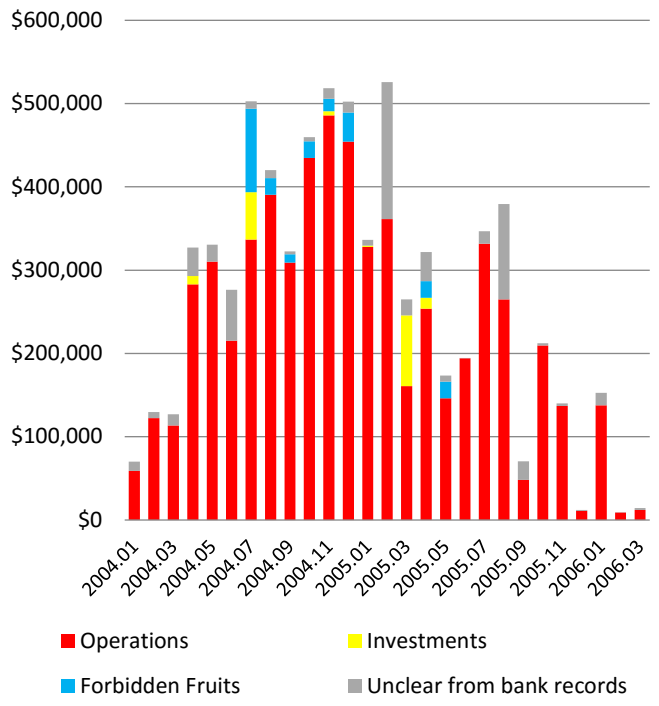
Had Ponzi been just a bad businessman rather than a fraudster, then there should have been expenses showing that he was actually implementing the business model that he had been pitching. There were not. The money that Ponzi collected went to hire more people to solicit more investors, to pay down debts, and to enjoy and show the wealth that made him look successful—suits for himself and jewels for his wife, a custom made limousine, and a seven-bedroom house. Ponzi claimed to have given some of the money to a man who went to Italy to buy the international reply coupons necessary for his model to work, but there appears to be no evidence that this man actually existed.[14]

[13] These numbers are based on reporting done by Mitchell Zuckoff in PONZI'S SCHEME: THE TRUE STORY OF A FINANCIAL LEGEND (2005).

[14] Ponzi pled guilty to federal charges and was sentenced to five years' imprisonment. He then stood trial on state charges while

Counting the money can be a big part of going after Ponzi's successors. Most money will go to maintaining or expanding the scheme (the employees that Ponzi hired and branches he opened to solicit more investors) and for the fraudster's own benefit, and little, if any, will actually be used to do what the fraudster has claimed to be doing.

For example, the graph below was used in a trial to help show that a defendant was lying when he told victims that he would use the equity from their homes for undisclosed investments that would enable him to pay off their thirty year mortgages in just five years while reducing their current mortgage payments significantly.[15] The red portions represented the money that went to keeping the scheme going (mostly payments related to earlier victims), and the blue and yellow portions represented the few investments that he and his partners actually made.



Monthly Expenses by Category

Health care fraud cases also can benefit significantly from simply counting something that seems odd. People committing healthcare fraud typically have gotten very good at papering their files to fool an auditor who is looking only at a few randomly selected claims in isolation. But if you step back and look at the files overall, that may reveal some kind of ridiculous pattern that will be powerful evidence of the overall fraud.

One common type of healthcare fraud involves doctors billing routine patient visits as if the visits were more complicated than they actually were. Complicated visits should typically take more time, and the American Medical Association includes typical times for each billing level. Adding up the number of visits in a day and multiplying them by the associated time can yield powerful evidence of fraud, especially when the totals become particularly ridiculous, such as the doctors who regularly bill more than twenty-four hours' worth of visits in a single day.

Another type of healthcare fraud involves doctors providing cosmetic light treatments to their patients but billing insurance companies as if they were destroying large numbers of precancerous lesions. To prove this fraud in a case in the Northern District of Illinois, the government took the defendant's files, put them in chronological order, and counted the number of lesions allegedly destroyed each time. The numbers added up and became hard to believe. Maybe a woman in her thirties could have had 119 precancerous lesions destroyed on her face in November 2006 and somehow did not remember being told about this condition. However, that is harder to accept when all the procedures are added up. In total, the defendant and his staff created files indicating that this woman had 2,456 lesions destroyed just on her face over the course of seven years.[16]

The defendant's files had been designed to beat an audit, and the large number of lesions that he claimed to destroy each time made the patients look sicker than they actually were and made the treatments appear necessary, thus helping to conceal the fraud. However, those same numbers, when summed up, became powerful evidence of the fraud and helped simplify a case that might have appeared complex at first glance.

Look for something weird or untrue or inconsistent in the files and data, and you can turn it into something powerful at trial.

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serving his federal sentence. During the trial, he claimed that he had destroyed all correspondence with his man in Europe, and ultimately was acquitted. A second trial on other charges ended with a hung jury, and Ponzi was finally convicted by a jury after the third trial in 1925.

[15] United States v. Felix Daniel, 11 CR 743 (N.D. Illinois).

[16] United States v. Robert Kolbusz, 12 CR 782 (N.D. Illinois).

III. Track Something

You can also use summaries to track particular facts and pieces of evidence and to highlight patterns via repetition.

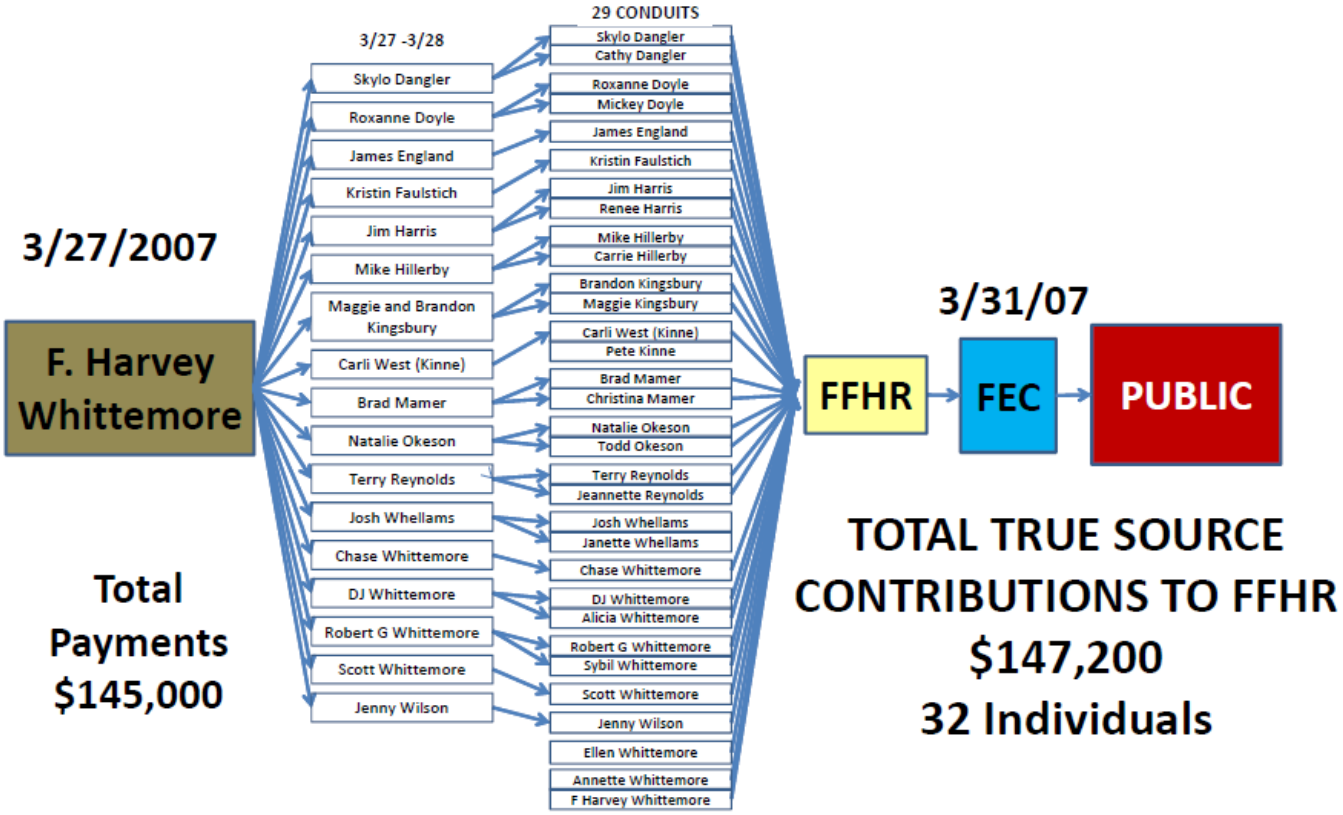
First, tracking something can create powerful evidence that would not be obvious or compelling if presented solely via oral testimony, especially when you track something that no one thought to lie about at the time.

HR-related records can be particularly helpful, such as the directories mentioned in the *Spotlight* example above. Bonuses that continued and grew over the course of a fraud scheme can help show that a defendant was more involved and knew more than she might claim. Also, payroll records can help show that a defendant was the only person who could have committed a particular crime.

In one case in the 1990s, postal investigators identified a postal supervisor who was stealing cash in part by determining that the supervisor was the only person who worked on each day that the thefts occurred. They also determined that the thefts started after he began working at that office and stopped after he was questioned by investigators. At trial, they showed this in part through an exhibit that simply compared payroll records with the dates of each theft.[17]

Second, tracking something in detail can prove that the defendant did not simply make an isolated mistake or was negligent, but was engaged in deliberate conduct that is strong evidence of intent. In the James Bond novel *Goldfinger*, Bond tries to talk his way out of a dangerous situation, but the villain has none of it. One time is happenstance and twice is coincidence, Goldfinger says, but the third time is enemy action. Similarly, one time may be an accident or mistake, two or three times may be negligence or sloppiness, but time after time is a scheme.

For example, in a campaign finance case, the defendant funneled money through multiple intermediaries to the ultimate recipient. The government used charts to show that each



United States v. Whittemore Exhibit

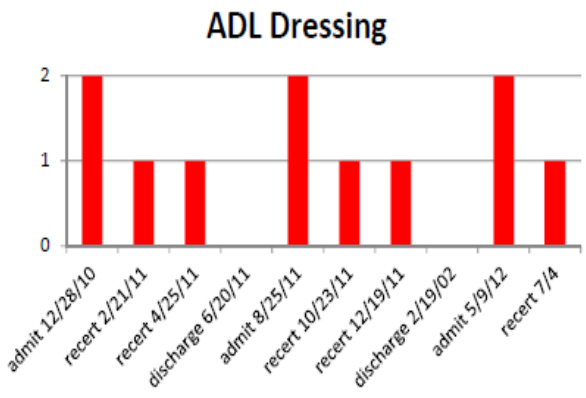
[17] United States v. Weaver, 281 F.3d 228 (D.C. Cir 2002). I also interviewed retired Postal Inspector Rory Pankhurst about the case on June 14, 2017.

intermediary's contribution followed the same pattern. On one day alone, the defendant transferred $145,000 to seventeen relatives and employees that were characterized as "bonuses" or "gifts" and simultaneously encouraged them to make contributions, sometimes explicitly saying that the money was intended to cover the cost of the contribution. At trial, the government introduced charts showing each step being repeated over and over again, a powerful depiction of the defendant's conduct and intent.[18]

Similarly, in health care fraud cases, one way that schemes try to make it look like they are providing medically necessary services is by occasionally discharging patients and then re-admitting them.

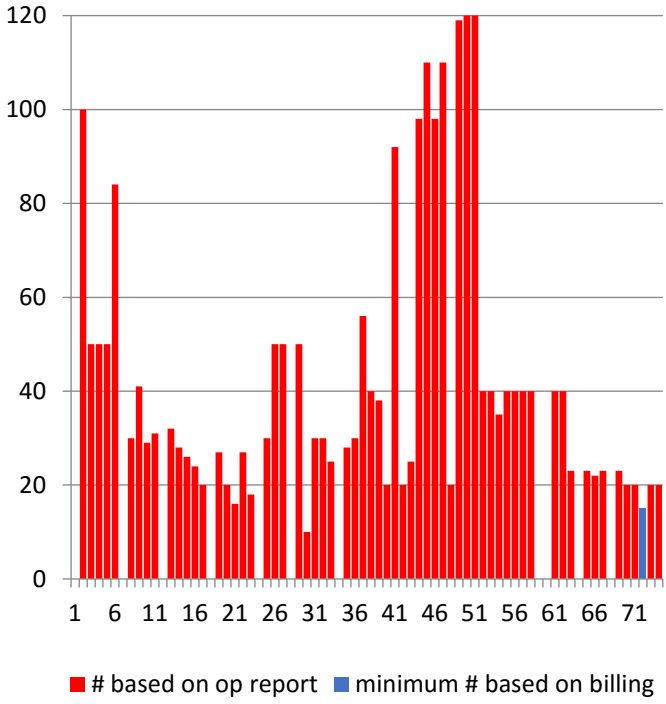
This can help fool auditors and can yield more proceeds in the long run. Summary charts showing the discharge and subsequent re-admissions can show patterns that undercut medical necessity and show criminal intent. For example, in one trial involving a doctor who had improperly certified patients for home-health services for years, the government used charts to show that the doctor regularly discharged patients and then re-admitted them even though there had been no change in the patient's condition. This pattern made no sense except as part of a fraud scheme, and thus showed that the services were not medically necessary, and that the defendant's actions were not merely occasional mistakes or inconsistencies.[19]

Similarly, in a case involving a nurse who lied about patients in order to bill Medicare for unnecessary home-health services, charts proved useful in proving the fraud. The chart to the left shows how the nurse lied at key times about the patient's condition, claiming that the patient could not dress himself every time that he was admitted or re-admitted. The patient may not be able to remember what his condition was on August 25, 2011, but he can remember that his ability to dress himself was not going up and down and up and down.



Fooling Auditors through Discharge and Re-Admittance

Third, tracking something over time can reveal key moments that can corroborate witness testimony or show the defendant's intent. In the dermatologist case mentioned above, the total numbers of lesions allegedly destroyed were virtually impossible to believe in some cases. However, a closer look at how the numbers changed over time was also significant. One large insurance company started to catch on in 2006. Suddenly, the number of lesions that the defendant was supposedly destroying each time dropped from 120 to less unreasonable numbers. The number dropped again in the summer of 2007, soon after a peer warned the dermatologist that what he was doing looked like fraud.



Number of AK Lesions Allegedly Destroyed Per Service

[18] United States v. Whittemore, 12 CR 68 (D. Nevada).

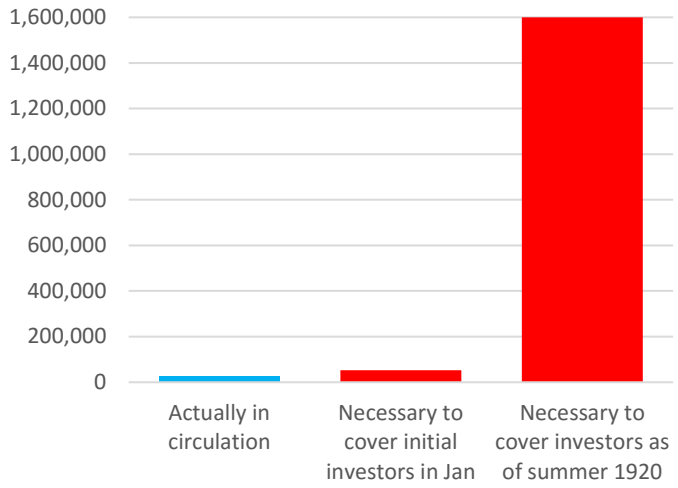
[19] United States v. Koroma, 13 CR 685-2 (N.D. Illinois).

Fourth, tracking disparate items with Rule 1006 summaries can help jurors see how evidence from different sources fits together and can save you time in your closing arguments. When evidence comes in at trial through multiple sources and out of chronological order, a simple timeline can help the jurors understand the materials better while you are still presenting the case. This can help them see the points you are trying to make, rather than leaving them in confusion until closing arguments. For example, the timeline below was used in a Western District of Missouri case involving multiple vehicles that were stolen and later recovered.[20] Timelines like this one helped show what happened to a particular vehicle, something that may have gotten lost otherwise.

IV. Contrast Something

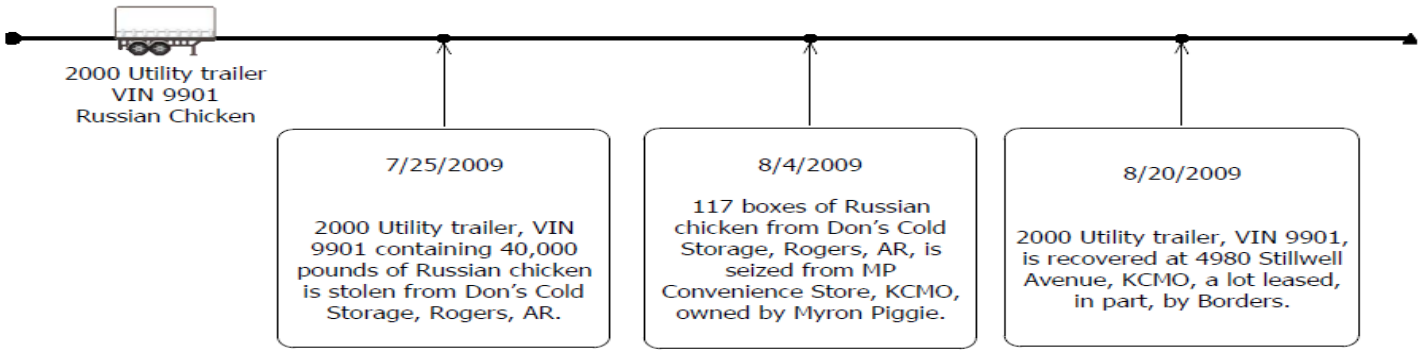
You can also use summaries to contrast the defendant's own statements or conduct against something else—typically, reality. Fraud cases often are about defendants making their victims (investors, clients, Medicare) believe that defendants are doing one thing when the reality is otherwise. They create a fake world that appears legitimate from the inside. Documentary evidence and summary charts can help jurors step out of the fake world and see the reality for themselves.

In Ponzi scheme cases, there probably will be a huge contrast between what the defendant says he is doing and what he actually is doing. Charles Ponzi told people that he was arbitraging postal reply coupons, but there were not enough coupons in circulation to make all the money that Ponzi was promising, and Ponzi was not actually buying large quantities of coupons as he would have had to if he really meant what he was saying.[21] The chart below visualizes this.



Ponzi Postal Reply Coupons

Similarly, when forensic accountant Bruce Dubinsky tried to show that Bernie Madoff was running a Ponzi scheme, there was a contrast between the stock purchases shown in Madoff's customer ledgers and the stock purchases that actually occurred. Dubinsky found that ledgers reported purchases on particular days that were in greater volume than had occurred in the entire stock market, and he found that ledgers reported purchases at prices that were lower than all the reported prices in the entire stock market.



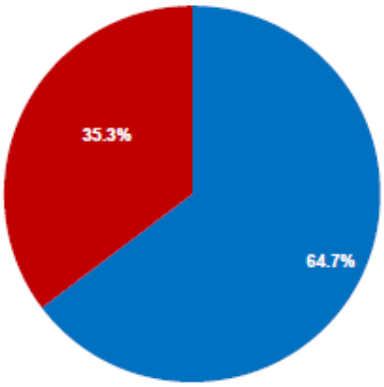
United States v. Borders Trial Timeline

[20] United States v. Borders, 12 CR 386 (W.D. Missouri). Thanks to AUSAs Gregg Coonrod and Cindi Woolery for their help.

[21] MITCHELL ZUCHOFF, PONZI'S SCHEME: THE TRUE STORY OF A FINANCIAL LEGEND (2005).

Evidence that trading did not occur in the IA Business:
Summary of out of range purported stock trades

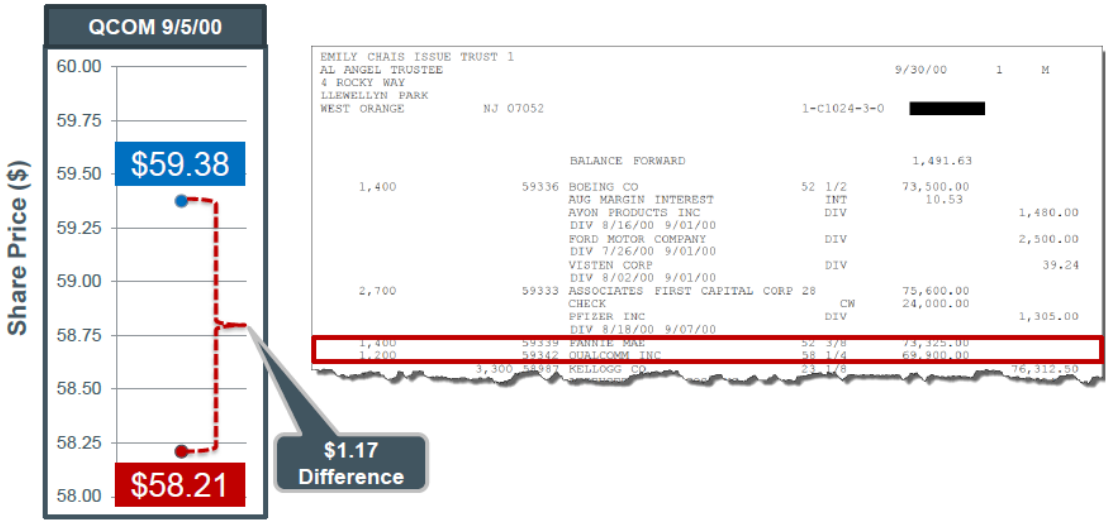
- There were 496 unique stock transactions that were outside the daily market price range between January 2000 and November 2008.
  - 321 of these transactions, or 64.7%, were sold above the market price.
  - 175 of these transactions, or 35.3%, were purchased below the market price.



■ Above the Market Price ■ Below the Market Price

Madoff Slide 1

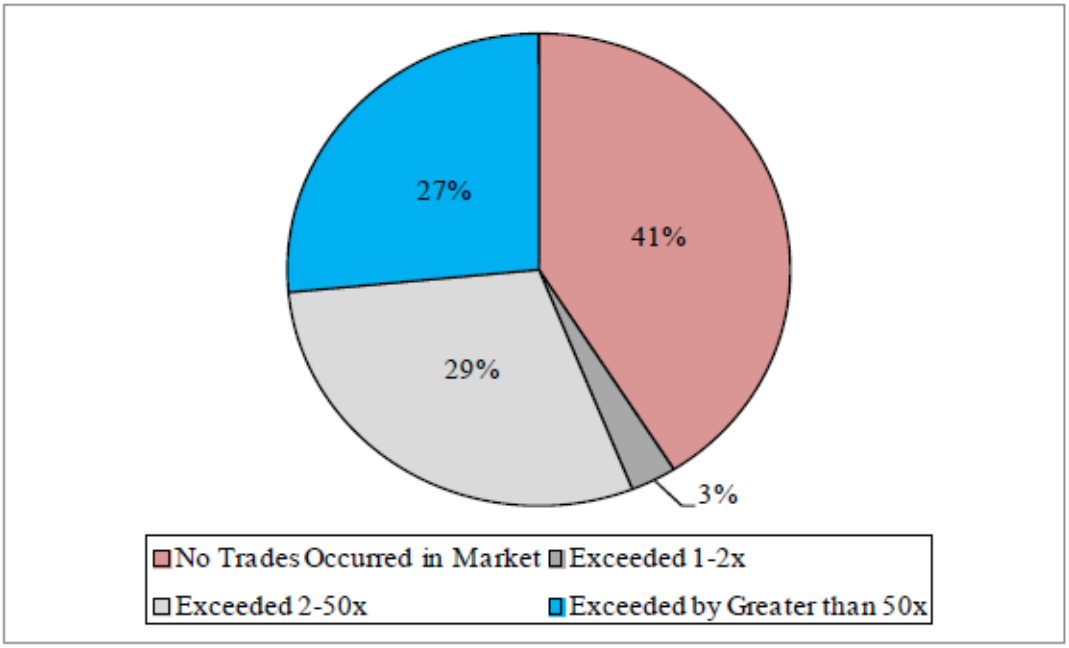
Evidence that trading did not occur in the IA Business:
Madoff purportedly bought stocks at a lower price than was available



Madoff Slide 2

Evidence that trading did not occur in the IA Business:

Volume Analysis - Convertible arbitrage Monthly Analysis [1]



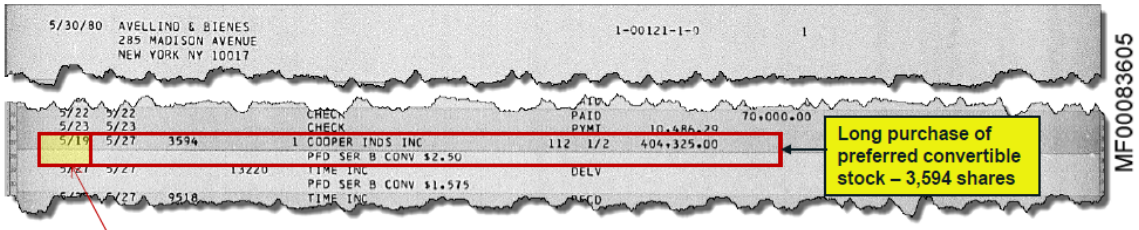
[1] 94% (407/432) of unique convertible securities transactions that were purportedly executed exceeded the daily market volume.

Madoff Slide 3

Evidence that trading did not occur in the IA Business:

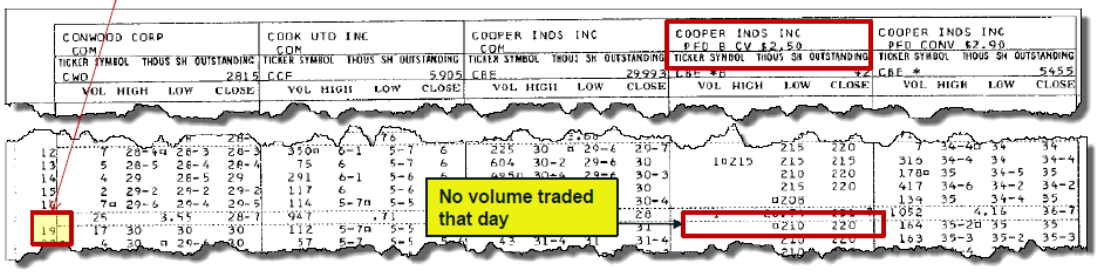
Convertible arbitrage example of a security that did not trade even though reflected on customer statement

Customer Ledger



Trade Date: May 19, 1980

Daily Stock Price Record: NYSE
Q2 1980



Madoff Slide 4

Dubinsky's slides were admitted at the trial of some of Madoff's associates via his role as an expert, but many of them probably could have been admitted under Rule 1006. Dubinsky testified at trial that he spent days going through thousands of banker boxes of Madoff documents that were housed in a warehouse on Long Island, and his work summarized the review of those and other voluminous records.[22]

Contrasting lies with reality can work in prosecuting other types of fraud. In the late 1990s and early 2000s, a defendant conspired with a courthouse procurement officer to rig bids and to overcharge the court. To prove the fraud, the government used multiple summary charts, including one that juxtaposed; (1) what the defendant actually purchased from his vendors, based on a summary of roughly 1,300 pages of records, and (2) what the defendant actually billed to the district court. A re-creation of a portion of this chart is below:[23]

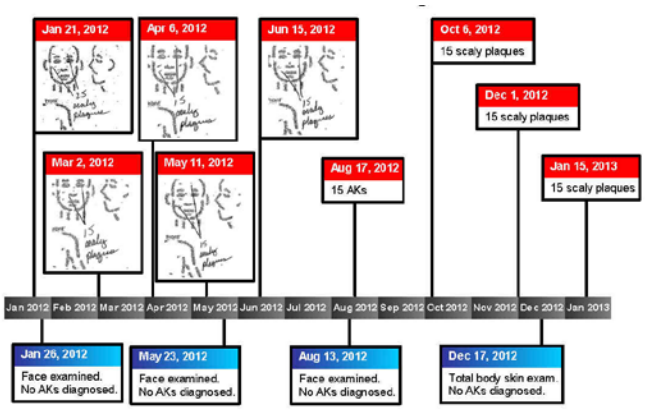
Court Invoice			Vendor Invoice		
Date	Qty	Price	Date	Qty	Price
10/9	400 cartons of paper	$36.95 per carton	10/17	300 cartons of paper	$23.50 per carton

Example Chart Proving Fraud

Rather than making the jury compare huge amounts of records, the chart did the work for the jury. With the chart, the jury can more easily see that the district court had paid for 100 more cartons of paper than the defendant himself could have delivered in October 2001.

In health care fraud cases, the records and data of legitimate providers can also provide strong contrasts with a defendant's fraud. For example, in home health cases, nursing agencies and doctors often claim that patients are "confined to the home" for extended periods of time. The agencies and doctors can submit claims making the patients appear that sick, but the files and data created by patients' other providers can show that the patients were leaving their homes during the same time periods and were in stable condition.

In another case involving cosmetic light treatments being billed as the destruction of precancerous lesions, the government learned that one patient had gotten such treatments at the same time as she was seeing another dermatologist. The government contrasted the two doctors' records in a timeline that was admitted under Rule 1006 and that showed that the patient received nine such treatments over a year in which the other doctor found no such lesions.[24]



United States v. Memar Chart

This chart accomplishes several things. First, it shows that this patient got multiple treatments in which the defendant's staff claimed to have destroyed large numbers of "scaly plaques" that were diagnosed as actinic keratosis lesions, even though the defendant himself never examined the patient during this entire period. Second, it shows that the patient was seen by another dermatologist multiple times during the same period, and that the other dermatologist never diagnosed any such lesions. This contrast helped show that the patient did not actually have the lesions that defendant claimed to have destroyed.

V. Practice Pointers

Creating a good summary is like developing a good witness. It takes time and preparation, it can be tedious and sometimes painful, and it can pay off.

Here are some pointers for creating good, effective summaries for trial:

- *Think of questions that data and documents might be able to answer.* Can the data corroborate a witness's account of how the scheme worked? Can data from the defendant or someone else

[22] United States v. Bonventre *et al.* (10 CR 228) (S.D. New York).

[23] United States v. Milkiewicz, 470 F.3d 390, 395 (1st Cir. 2006).

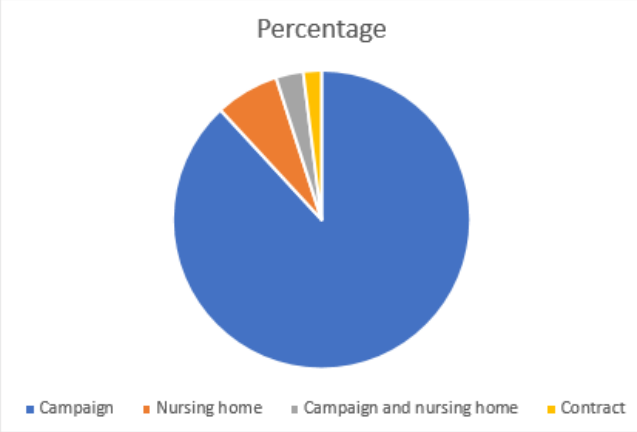
[24] United States v. Memar, 15 CR 345 (N.D. Illinois).

contradict the defendant's statements or promises? Can the data tell you when a scheme peaked or collapsed, suggesting turning points that can be useful to explain at trial? Are there flaws in the data or documents that can show the larger scheme (e.g., a defendant who is automatically billing for services not actually rendered will be revealed by occasional "mistakes," such as billing for visits performed on patients who were actually dead or out of town).

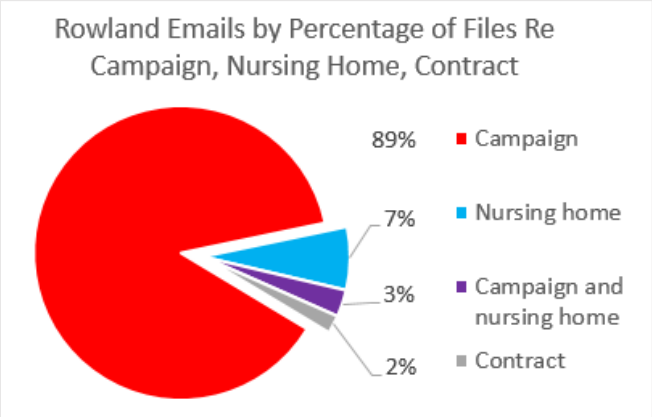
- *Build a database based on a targeted review of voluminous records.* Find a few things to track or add up, and start recording the data in a spreadsheet or table. Create a template for the investigative team to use, test it out, track something, and collect the results in a table or spreadsheet.

- *Start counting, tracking or contrasting something with draft charts.* Some useful computer programs that you can use are Microsoft Excel or Microsoft PowerPoint for charts, tables or graphs, or Lexis TimeMap or PowerPoint for timelines (you can always use paper as well!). If you need help setting up formulas, meet with a financial analyst and explain the kinds of things you are trying to do (your office's fiscal or accounting people generally should be familiar with Excel and might be able to help out as well). Your initial drafts may not work out, or may reveal data that is helpful but not clear enough to be worth using at trial. Step back and think of another way to look at the data from your database. Go back and track something else if necessary.

- *Make the charts clear and legible for a general audience.* Trials typically are not the place for complicated graphics based on complex formulas or for logarithmic scale. Make charts that convey a lot of information while being based on simple principles that a jury will be able to follow, and make sure the charts are legible to jurors looking at them from some distance. I generally make charts first in Microsoft Excel in order to take advantage of Excel's formulas and its abilities to sort and filter data, and then copy the chart over to PowerPoint where I can have more control over how the charts will look on the screen or when printed out. I also use the computer software to make initial design choices but then modify many elements myself, such as changing colors in a graph to highlight the most significant data. The first chart below shows the way that Excel created the Rowland chart shown on page 38, and the second chart shows how I changed it for presentation purposes. I revised the title, changed the colors (red for the most damning, blue for the legitimate emails, purple for the mixed emails, and grey for neutral emails), moved the legend to the right, added the data labels, and moved them to fit the legend.



Example of Auto-Formatting by Microsoft Excel



Same Chart Reformatted for Presentation Purposes

I use the TimeMap program to create timelines, but I manually tweak the timelines to highlight the points that I know matter, even if the computer does not. For example, the timeline comparing two doctors' records below was designed so that the defendant's claims were above the timescale and any actual examinations were below, making the contrast more obvious.

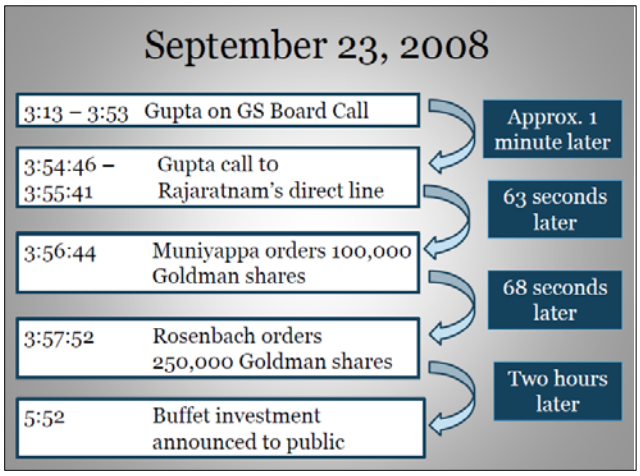
- *Keep in mind the distinction between Rule 1006 charts and what you can use at closing.* A chart that is admitted under Rule 1006 should be non-argumentative, should be based on largely if not entirely undisputed information, and should not draw any inferences on its face. At closing, you can use a more argumentative version. In the insider-trading trial of Rajat Gupta in the Southern District of New York, a relatively simple chart (the first below) summarized some of the communications between the defendant and the person he tipped off regarding a soon-to-be hot stock on a particular date. This put the evidence before the jury in a simple, non-objectionable way and set up a more compelling visual for closing arguments (the second image below).

Certain Communications September 21, 2008 - September 24, 2008

9/23/08	9:45 am	Galleon	McKinsey CT Office (Gupta Direct Line)	14 minutes	603
9/23/08	9:47 am	McKinsey CT Office (Gupta Direct Line)	Gupta Cell Phone	13 minutes	
9/23/08	3:13 pm	McKinsey CT Office (Gupta Assistant Line)	Goldman Sachs	Total Duration= 41 Minutes 12 Seconds	604, 616, 619
9/23/08	3:13 pm	McKinsey NY Office (Room 2704)	Goldman Sachs		
9/23/08	3:54 pm	McKinsey CT Office (Gupta Assistant Line)	Rajaratnam Direct Work Line	Total Duration= 56 seconds	604, 616, 619, 628
9/23/08	3:55 pm	McKinsey NY Office (Room 2704)*	Rajaratnam Direct Work Line		
9/23/08	6:15 pm	Gupta Cell Phone	Rajaratnam Direct Work Line	1 minute	601
9/23/08	6:16 pm	Gupta Cell Phone	Rajaratnam Cell Phone		625, 601
9/23/08	6:16 pm	Gupta Cell Phone	Rajaratnam Assistant Line	1 minute	601

*Duration for McKinsey NY Office (Room 2704) to Rajaratnam Direct Work Line is 30 to 35 seconds

Communication Timeline 1



Communication Timeline 2

- *Think about how you are going to admit the charts at trial.* I often will draft charts myself for trial to see what is effective, and then ask an agent or an investigator to redo or verify the work themselves. Consider having the witness go through some specific examples before showing the final summary—this can help establish the credibility of the summary and minimize confusing cross-examination. Show your work.
- *Think about when you are going to admit your summaries at trial.* Data can corroborate insiders when they describe a scheme, but consider flipping this around. If the summarized data goes in first, then the jury might actually understand the scheme better and have better context for the witnesses' testimony. In health care fraud cases, presenting the defendant's own files to highlight implausible patterns may be a great way to start the trial. This can leave jurors with doubts about the defendant's practice and sets up the testimony of witnesses whose testimony might otherwise be confusing or out of context.
- *Consider ways to ensure that your charts get admitted at trial.* Provide the underlying materials to defense counsel as part of discovery, and provide some charts to defense counsel as early as possible, even if they are in draft form. Consider providing the underlying spreadsheets with the formulas used to create the charts. This is by no means required, but can avoid issues that might endanger admission at trial.[25] Consider offering to meet with defense counsel to explain any methodologies ahead of trial. Also, consider filing motions with draft charts ahead of trial to avoid last minute problems.
- *Finally, do not wait until trial to start thinking about what summaries might be useful.* If you wait until trial to make your summary charts, you may never get to trial. Taking the time to do a summary chart during the investigative phase unfolds can open new leads and new questions that can shape your case and even accelerate an investigation. Summary charts can corroborate witnesses and can help convince defendants to plead guilty. Embracing this kind of approach

[25] *See* United States v. Lewis, 594 F.3d 1270 (10th Cir. 2010) (government was not required to produce a database compiling more than twelve boxes of bank records as long as the records were available, but noting that providing access to the database may make it easier for the other party to check the accuracy of any summary).

early on can help you simplify and transform your cases.

Good luck!

Stephen Chahn Lee has been an Assistant United States Attorney in the Northern District of Illinois since 2008, most recently serving as senior counsel in his office's health-care fraud unit. Before becoming an AUSA, he was an associate at Debevoise & Plimpton LLP and a reporter for the Chicago Tribune. He is a graduate of Yale College and Columbia Law School.
