Chapter 22

The Role of Technology and the Rise of Big Data

The Demise of "Anecdata"?

When recently reading an ABA article, I came across a word I'd not seen before, but one that I felt summed up very effectively how lawyers have typically made pricing and matter-planning decisions. That word is "anecdata," a term coined (I think!) by Mark A. Lemley, a Stanford law professor.

Although Mark was originally talking about it in a slightly different context (that of Big Data, a subject we will return to shortly in this chapter), I think it also appropriately sums up lawyers' traditional hesitation (or perhaps even downright resistance?) to embrace technology and, similarly, the strong reliance on their own judgment.

During this chapter, we will look at not only why those early attempts at bringing technology to law in the sphere of pricing and legal project management have been relatively low-key to date, but also how technology (and the providers of this technology) is now advancing to provide real and meaningful data to these areas. We will also take a brief look at one of the newly emerging themes or buzzwords, not just in the legal arena but, more generally, that of the rise of Big Data.

^{1.} Joe Dysart, How Lawyers Are Mining the Information Mother Lode for Pricing, Practice Tips and Predictions, A.B.A. J., May 1, 2013, available at http://www.abajournal.com/magazine/article/the_dawn_of_big_data/.

The "Early Pioneers"

In many respects the term "early pioneers" can apply not only to the technology companies themselves that were quick to see the opportunities that lay in both providing pricing and, slightly more recently, legal project management software, but also to those *law firms* that quickly saw the potential of these tools.

The initial focus was very much around price-comparison software and tools that supported rate management, rate comparisons, or matter-specific data. Although there were many tools available to support pricing analysis in other industries and sectors, there was little that was relevant for those whose main focus was the practice of law, and therefore the advent of these tools was somewhat revolutionary for many of us.

Many of these early technology pioneers (including Peer Monitor, Redwood Analytics, Serengeti, and TyMetrix) were aggregating law firm billing and rate data, aggregating client-related e-billing data, or a combination of the two. Each also identified its core market, with some being focused purely on law firms, others on clients, and a number now branching out to provide differing snapshots or views to each.

Through providing this information in a *relatively* simple format, each was able to offer law firms (or law firm clients) a more dynamic snapshot of what the potential peer group was charging for different types of work, by level, by practice area, city, and even by jurisdiction. Indeed, many still are. However, whilst these products and solutions remain valuable in their own right, they in some respects will continue to be hindered in that *they can only report what they know* (or "see").

In the area of legal project management, there were also a number of firms or products seeking to make this process easier for law firms. Thomson Reuters' Engage product is perhaps the most widely known of these.

The Challenge of Adoption

However, in both the pricing and legal project management arenas, I'm not sure if any firm has really, as of today, "cracked the code."

The overall adoption of these tools has in some degree been hampered by three themes:

- These tools were typically in the hands of a select number of individuals within the law firm, typically those either in pricing and project management roles (see the next chapter on the rise of these roles) or in finance. It has therefore been difficult to make this information more widely available within the firm due purely to existing resource constraints. In some respects, adoption has been hampered by many lawyers' lack of *experience* in trying these tools. There is also another factor at play here. As both Jerry Walters and Larry Bridgesmith (of ERM Legal Solutions) commented, "the more successful a lawyer has been, the less likely they are to understand the need for change."²
- A number of the tools were initially not as intuitive or as user friendly
 as they may be now. Some of the earlier applications, through a desire
 to be as comprehensive as possible, sometimes appeared overly complex—once again, in effect self-selecting who in the law firm would be
 able to use this information.
- A final key constraint, previously discussed, is the fact (certainly for pricing- and rate-related applications) that the information is restricted to those who are willing to provide it or via clients that have mandated that firms use certain e-billing platforms. As such, gaps commonly exist in practice area and geographic coverage in many of these tools. This may not pose an issue for more regionally or nationally based law firms, but certainly comes into play for those with a more international flavor.

^{2.} Larry Bridgesmith and Jerry Walters of ERM Legal Solutions in private e-mail correspondence with the author (July 15, 2013). The quote was taken from a broader response to the question, "What, in your opinion, has limited adoption of these tools to date?"

A Brighter Horizon?

Despite the potentially gloomy outlook painted above, we should perhaps not be too downcast. Since late 2011, there have been significant strides in both the functionality of pricing and legal project management tools.

These tools are becoming much more inclusive, and providing much stronger and more user-friendly analytical tools, whether through the form of dashboards or quickly tailored analytical models to help the user assess a matter's potential profitability and effort compared with not only internal information but also external benchmark data. These are also now becoming increasingly available on mobile devices.

Potential benefits now offered include better benchmarking intelligence on how much matters cost, how long they take to complete, and what level of resource is going to work. From clients' perspectives, these tools provide them with the ability to also review data in a more granular level (for example, by practice area, matter type, firm size, experience level, rates, etc.), therefore helping them identify where there may be further cost or improvement opportunities from their existing legal providers.

Nowhere has this technical evolution been greater than in the field of legal project management. Whereas a number of the earlier tools were very much focused on the planning and budgeting phase of a matter, there are a number of tools (such as ERM Legal Solutions' Lean4Legal product offering) that are much more comprehensive in scope, allowing the user to track progress from the beginning of the matter through to its conclusion. In addition, a number of these tools are now much more intuitive to the end user and, with this, are much more likely to be adopted by those in the "front line" of conducting legal matters rather than those who remain in the back office.

The Rise of Big Data

One of the key buzzwords of this time is "Big Data," in many respects the cloud computing buzzword or catchphrase of the 2012/2013 generation.

The term is by no means exclusive to use in the legal context, ranging from science (think how much data is produced and requires analysis for the Large Hadron Collider trying to determine the so-called God particle) to government to business, more generally. It has appeared in magazine and journal headlines as diverse as those on foreign policy to those on popular culture. So what the heck does it mean?

The term "Big Data" is "used to describe a massive volume of both structured and unstructured data that is so large that it is difficult to process using traditional database and software techniques." Although often associated with purely the *volume* of data, it can also refer to the *underlying technology* (which may include the appropriate tools and processes) organizations require to be able to handle this large volume of data and its subsequent storage.³

From a business perspective, it provides the ability to create, manipulate, and manage these large data sets—and, most importantly, then drive much more robust and comprehensive analysis. Given that the volume of business data worldwide, across all companies, doubles every 1.2 years, according to estimates, the challenge (and potential opportunity) will only get bigger.⁴

Why all the attention in legal circles? The first reason is closely related to some of the themes discussed above.

The Law Firm Dimension

A number of firms are already using currently available data from external sources to get a better understanding of what their competitors are charging and how they are staffing matters in an attempt to refine their own propositions to their clients. Through better and more targeted manipulation of this data, it is allowing them to make better, more "intelligent," and more analytically based commercial decisions.

^{3.} See What Is Big Data?, Webopedia, http://www.webopedia.com/TERM/B/big_data

^{4.} See Big Data, Wikipedia, http://en.wikipedia.org/wiki/Big_data.

As Craig Raeburn, managing director of TyMetrix Legal Analytics, said of its LegalView data warehouse product (one of a number of similar products in the marketplace), "[M]any (law firms) have used our data warehouse to compare the rates and understand the best way to position themselves with clients—(whether as a) . . . low cost provider or high end value player." 5

But that is only part of it. Some of the applications and tools available go much further, allowing firms to identify and exploit new opportunities (the "diamonds in the rough," if you will). Craig, in the same article, goes on to provide another example of how one firm used similar data to help understand its potential opportunity for market penetration based on the average legal spend of the corporations covered as a means of determining whether it should focus its expansion efforts. Other opportunities outlined in the article also included, for example, tools to help lawyers better understand and better predict case outcomes for areas such as medical malpractice through to patent litigation.

The Fear of What the Client "Knows"

Another key reason that it is garnering a lot of attention in legal circles is that there is a high possibility that our clients are not only seeing the same but *even better* data.

(One of the advantages of being a client in this context is that you get to see what other firms are charging and also how effective those firms are in delivering their matters, whereas we can only really compare on a client-by-client basis. Although much of this information had previously been available, like in law firms, it was typically the preserve of a select number of individuals (for example, chief legal officers or those within the client's procurement organization).

Given the advances in technology, our clients are now getting a much more refined and appropriate view. With legal spend often being one of the top two or three cost centers for many organizations, these types of

^{5.} Dysart, supra note 1.

analytical tools provide them with a powerful advantage to be able to manage their own internal budgets effectively. Some tools, such as Sky Analytics Right Rate Advisor tool, can even suggest to in-house counsel whether they should approve, reject, or reduce increases in hourly rates requested by their outside law firms. These tools are providing our clients with the ability to benchmark against their peers how much they are spending on legal services and even which firms are successfully winning pertinent mandates for them.

What Does the Future Hold?

As Michael Lipps, a vice president at LexisNexis (a key provider in this space) noted: "[W]ith big data, virtually every aspect of the law is open to detailed analysis. That technology is already there. And the data is most certainly already there. It is simply a matter of imagining what you want to look for." Of course, you then need to make it happen.

Some law firms, the "new wave" of pioneers, if you like, are already beginning to embrace the opportunities that Big Data may provide. Most of those that are, are doing so with little publicity (after all, why give away your competitive advantage?), while others more visibly (such as Olswang's revelation that it was looking to hire a team of "pricing boffins" to build a stronger analytical capability in-house to help analyze this new source of data⁷).

The impact of the evolving technology in our field is certainly something we should be keeping a watchful eye on. It has much potential, but, as noted, there are some limitations—such as the current quality and coverage of data, coupled with the willingness of law firm partners to get stuck into the detail rather than having a select few reviewing then synthesizing and communicating the key messages (as many respects the value of this information is through its immediacy).

Id.

^{7.} Matt Byrne, Olswang Targets Pricing Boffins to Gain Market Advantage, LAWYER, June 6, 2013, available at http://www.thelawyer.com/analysis/the-lawyer-management/olswang-targets-pricing-boffins-to-gain-market-advantage/3005706.article.

Fee and rate information provided by these tools will continue to be helpful in guiding both matter proposals and the establishing of timekeeper rates on an annual basis, with the benefit of some external corroboration.

However, in my mind, the greatest opportunity in the mid- and longer term is the information that will be available around how we can improve our current processes in certain matters, not just from the perspective of the law firm but also how we can do so *collaboratively* with our clients. There are currently very few tools available in the marketplace that allow you to do *elements* of this (at time of writing, one being TyMetrix Matter Analyzer), but I'm confident that this will be a fast-growing area in the near term. The technology that maintains a clear focus on ease of adoption (and the corresponding implementation) can lay claim to the "high ground."

When we talked about competitive intelligence earlier on in the book, I highlighted that this can become costly both in terms of time expended and in terms of finance (although the latter is becoming less so over time). It is therefore advisable to have a clear plan of what the key data is that you're looking for, what you are looking to accomplish, and who is actually going to be using this in the "real world" before embarking down this path, as it could be expensive—in more ways than one.

As Paul Lippe, one of the most insightful of commentators in this field, commented that "in every large-scale human endeavor (whether armies, sports teams, businesses, universities, professions like law or medicine, or name-your-institution) technology changes first, then techniques and tactics, and then culture."

He and I are both agreed that law is now very visibly going through this change.

It may be too soon for us to predict the demise of *anecdata* in pricing and budgeting decisions, but perhaps that day is not too far in the future after all.

^{8.} Paul Lippe, Expert Analysis 5: Emerging Trends That Are Changing How Lawyers and Law Firms Work, in The Future of Legal Services: Expert Analysis 29 (Kate Clifton ed., 2011).

Don't forget (a summary of the key points):

- Technology is now having an increasing role to play in how firms manage their pricing and legal project management capabilities—many of the initial challenges to adoption have been removed, although some still remain (for example, around practice area and jurisdictional coverage).
- Some progressive clients are increasingly adopting many of the newly emerging tools, especially those allowing price or rate analysis—law firms need to make sure that, as a minimum, they are familiar with what these tools are, and what they can do.
- Most law firms will be best served by utilizing a number of technology-based resources—but need to do so in a more holistic manner and with a clear roadmap in place (otherwise this may become time-consuming and expensive, with limited results).
- Pricing and legal project management decisions being increasingly driven from fact rather than perception (or "anecdata") will become the norm—but with the exception of the "new pioneers," not quite yet.