Indian Journal of Law and Technology

Volume 13 | Issue 1 Article 5

2017

# Big Data & Litigation: Analyzing The Expectation of Lawyers to Provide Big Data Predictions when Advising Clients

# BIG DATA & LITIGATION: ANALYZING THE EXPECTATION OF LAWYERS TO PROVIDE BIG DATA PREDICTIONS WHEN ADVISING CLIENTS

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## I. Introduction

In recent years, the words "big data" have reverberated in multiple industries across numerous countries – from social media platforms to banks such as Facebook[1] and Morgan Stanley[2] respectively, companies are joining the big data bandwagon. The legal industry has also begun embracing the use of big data analytics in their work–in early 2016, it was reported that lawyers have used big data tools, for the purposes of "billing, time management, marketing and customer relations functions". Considering the growing interest and reliance by law firms on big data, it is interesting to explore the trend of how such "technology could be applied to the fundamental research and case preparation which is the core of their job".[3] One such possibility is the use of big data in litigation.

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1 Jamie Lockwood, 'Facebook makes big impact on Big Data' (*www*.facebook.com, 19 September 2013) <https://www.facebook.com/notes/facebook-academics/facebook-makes-big-impact-on-big-data-at-vldb/594819857236092/>.

2 Eva Wolkowitz and Sarah Parker, "Big Data, Big Potential: Harnessing Data Technology for the Underserved Market" (www.morganstanley.com, 2015) <http://www.morganstanley.com/sustainableinvesting/pdf/Big_Data_Big_Potential.pdf>.

3 Bernard Marr, "How Big Data is Disrupting Law Firms and The Legal Profession" (*www.forbes.com*January 20, 2016) <https://www.forbes.com/sites/bernardmarr/2016/01/20/how-big-data-is-disrupting-law-firms-and-the-legal-profession/#5b6de8b27c23 >.

This general article intends to provide a background of big data and law, and to provide insights on the interaction between professional legal ethics and big data analytics, i.e. whether a lawyer can be disciplined for failing to use big data analytics in litigation cases. While most references in this article will be made to developments in the US legal technology/legal industry scene, this article will also provide a short segment on general developments of big data and law in the developing world. Ultimately, this article hopes to shed light on what litigators may expect from the use of this technology that is gaining traction in the legal industry.

## II. Big Data x Law

> *"Big data in general, and predictive data analytics in particular, are the potential holy grail in the practice of law."*[4]

While there is "no standard definition[5]" on big data, it can, in a nutshell, refer to "extremely large data sets that may be [analyzed] computationally to reveal patterns, trends, associations especially relating to human [behavior] and interactions".[6] Certain law firms have used big data in their work, and the next few sections will delve further into the intersection between big data and law, and in particular, big data and litigation.

### A. The Intersection of data analytics and law

The use of big data in law firms is not novel. According to Stanford Law School's CodeX legal technology directory, there are presently at least 52 startups or companies in the legal tech industry that are providing or aim to provide data analytics services;[7] some focus on providing data analytics for corporate lawyers doing due diligence through "uncover[ing] relevant information from contracts",[8] whereas others assist litigation lawyers in predicting the chances of a successful appeal by a specific judge.[9] Besides startups, other companies in the legal support services industry have penetrated the big data market too. One example is LexisNexis, which offers a

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4 Sharon D. Nelson and John W. Sinek, "Big Data: Big Pain or Big Gain for Lawyers?" [July/August 2013] *39 Law Practice Magazine* <http://www.americanbar.org/publications/law_practice_magazine/2013/july-august/hot-buttons.html>.

5 Ibid.

6 'Big Data'(*Oxford Dictionaries*) <https://en.oxforddictionaries.com/definition/big_data>.

7 'Legaltechlist' (*Stanford Law School* 2017) <http://techindex.law.stanford.edu/companies?category=8> accessed 15 January 2017.

8 'Kira Systems' (*Kirasystems.com*) <https://kirasystems.com/> accessed 15 January 2017.

9 'Premonition' (*Premonition.ai)*<http://www.premonition.ai> accessed 7 January 2017.

software called *LexMachina* that "mines litigation data, revealing insights never before available about judges, lawyers, parties, and the subjects of the cases themselves, culled from millions of pages of litigation information",[10] another example is Bloomberg's "Bloomberg Law Litigation Analytics", which aims to "identify meaningful patterns among infinite legal data points to inform your litigation strategy, predict possible outcomes, and better advise clients (…)".

It can thus be said that the legal industry, at least in the US where a large proportion of these data analytics companies target, is not devoid of legal analytics. The question therefore is how quickly law firms – an industry that is claimed to be "notoriously slow-to-evolve"[11] – will respond to these developments. It is suggested that law firms may adopt them on the following grounds: (i) whether it is compulsory, i.e. they are required by the jurisdiction or state's bar association to use data analytics in their legal services, failing which they face sanctions for breach of professional legal ethics; or (ii) whether it is complimentary, i.e. it is not an obligation for lawyers to perform data analytics on their tasks at hand, but rather a perk that the client benefits from.

In this paper, the issue is relatively moot if the provision of legal data analytics is a complimentary service rather than an obligatory one. The more interesting question is the former – considering that legal service support providers are doling out big data analytics services to law firms to allow them to better advice their clients with arguably better advantages, will this be seen as a compulsory service that law firms must offer, failing which they fall foul of their professional duties of working with due diligence? To determine this question, the paper will first discuss big data in litigation, next a discussion on the scope of the ethical duties of lawyers vis-à-vis clients, and finally analyze whether providing big data analytics is compulsory for lawyers.

## B. The Use of Big Data in Litigation

As previously mentioned, both Bloomberg and LexisNexis have developed their own legal analytics platform. Both platforms target litigators – by "min[ing] litigation data"[12] and "case law judicial dockets"[13] to reveal

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[10] 'LexMachina' (*LexisNexis*) <https://www.lexmachina.com> accessed January 4, 2017.

[11] Sara Randazzo, "Data Tools Offer Hints at How Judges Might Rule" *The Wall Street Journal* (December 13, 2016).

[12] "LexMachina" (*LexisNexis*) <https://www.lexmachina.com> accessed January 4, 2017.

[13] 'Bloomberg Law Litigation Analytics' (*Bna.com*, 2017) <https://www.bna.com/bloomberg-law-litigation-m57982078880/> accessed 8 January 2017.

insights and trends that may be of strategic use to litigators advising their clients;[14] some examples will be provided below.

### i. Preparing or filing the statement of claim

When preparing to file the statement of claim, some key considerations that come into mind include factors such as which jurisdiction is the best place to commence the suit, which litigator has the best odds when addressing which judge, what is the average amount of damages the client can expect to receive should he or she win the case. Choosing the right jurisdiction or state to commence the litigation suit may be critical for certain types of lawsuits. For instance, Mr. James C. Yoon, an IP litigator in the US with Wilson Sonsini Goodrich & Rosati Professional Corporation, indicated at Stanford Law School's International Summer Program in Understanding US IP Law in August 2016 that based on statistics provided by *LexMachina*, two of the most popular districts for patent cases are Eastern District of Texas and the District of Delaware, with the former having a lower "win" rate for both Plaintiff and Defendant, although the former having a higher voluntary settlement rate as well.[15] These statistics can be beneficial to clients who are considering IP litigation and their strategy therein. Companies such as Premonition provide that allows users to determine which lawyer has better odds in winning when appearing before a specific judge.[16] Outside the US, a French service called *Prédictice* uses an algorithm to "calculate the probabilities of resolution, the amount of compensation, and identify the most influential means",[17] whereby "finding the best argument for your client becomes simple".[18]

Another example is LexisNexis' *LexMachina*, which provides data analytics for the statutory damages awarded in the area of Copyright Litigation. This may be useful to clients who are considering whether the legal fees and effort expended in the litigation suit are justifiable vis-à-vis the amount of damages recoverable. Finally, data analytics tools in the market are also providing clients with the ability to discover more insights about your counsel as well – by providing "track records of your Attorney",[19] or selecting a "Co-Counsel who [has] never lost in front of certain Judges".[20] With such

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[14] Ibid.
[15] James C. Yoon, 'IP Litigation in United States' (On file With Stanford Law School, Unpublished Presentation, 5 August 2016).
[16] "Premonition" (*Premonition.ai)* <http://www.premonition.ai> accessed 7 January 2017.
[17] "Predictice" (*Premonition.AI*) <https://premonition.ai/law/> accessed February 28, 2017.
[18] Ibid.
[19] "Legal" (*Premonition.AI*) <https://premonition.ai/law/> accessed February 28, 2017.
[20] Ibid.

information, clients now have more factors of consideration before deciding to launch into the lawsuit, and with which lawyer by his side.

### ii. Discovery

Upon deciding to commence suit, data analytics can be used during the discovery phase to plough through the volumes of discovered data and information to predict useful trends for the litigation lawyers. With the rise in large amounts of electronic data (e.g. e-mails, PDF files, or even AutoCAD drawings), big data analytics tools can "help make sense of this tsunami of information and give attorneys faster, more reliable access to potentially relevant data that needs to be processed and reviewed".[21] Some possible functions include the algorithm suggesting to the litigator that there are some missing documents based on a mismatch between the list of items produced by the opponent for discovery and the actual items eventually produced, or that based on previous cases of the same scale and issue, there are some commonplace documents that are missing in the lawyer's volume of discovered documents. These may help a lawyer to be more efficient and reduce negligence arising from missing out critical documents in the stacks of seemingly unending paper trails, and will be especially useful for lawyers in litigation cases with voluminous amounts of documents.

### iii. Appealing

Data analytics can provide information on how successful an appeal will be, if sought. This can include tracking cases to check the success rate of appeals and whether there are any recent cases that have succeeded on appeal,[22] thereby helping clients decide whether they would like to expend more resources in this case, or to cut losses and move on.

## C. Pitfalls in the Use of Big Data Analytics

While big data appears to benefit clients by providing them with insight on the likelihood of their claim's success and finding the best lawyer, there are some potential pitfalls such as (i) the coverage and scope of big data; (ii) the reliability of the data used by such data analytic tools in predicting trends; and (iii) novel issues in litigation and the usefulness of big data analytics therein – these will be discussed subsequently.

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[21] Sharon D. Nelson and John W. Sinek, "BIG DATA: Big Pain or Big Gain for Lawyers?" [July/August 2013] *39 Law Practice Magazine* <http://www.americanbar.org/publications/law_practice_magazine/2013/july-august/hot-buttons.html>.

[22] 'Advanced Docket Search' (*Docket Alarm*) <https://www.docketalarm.com/features>.

### i. How big is big data?

Predictions and trends are derived from data – generally, the bigger the sample size, the more accurate the prediction should be.[23] What is important is thus the sample size used by the analytics tool to predict. For instance, if the court of a specific district and a specific state has only heard one copyright case and ruled in favour of the plaintiff, and the analytics tool scans all possible case law in that state and suggests to the user that the success rate is 100% (without highlighting that only one case was available), can this be prediction be seen as reliable?

This then becomes a selling point for data analytics tools. *Premonition* states that it has "The World's Largest Litigation Database". It has further mentioned that *Premonition* "has more coverage than Thomson Reuters, LexisNexis and Bloomberg combined", because it has the largest collection of court data from several jurisdictions, such as the US Federal System and the UK High Courts.[24] One would note that the sample size of data used to churn out big data predictions in each of these data analytics tools – from LexisNexis's *LexMachina*, Bloomberg's Law Litigation Analytics, to Premonition – are different. In this regard, how does a lawyer discern whether which legal analytics platform provides the most reliable results, especially if platforms do not disclose the source in which they retrieve their data to crunch numbers and produce predictions? This concern will be debated in the next section, i.e. the reliability of the data provided by these platforms.

### ii. Reliability of the data

One important question is whether analytic tools produce reports based on verifiable data sources (e.g. cases provided directly by the relevant judicial authorities such as the Canadian Legal Information Institute or Australian Legal Information Institute), or is derived by a third-party that provides softcopy decisions converted from hardcopy decisions. Furthermore, there is no guarantee that the hardcopy to softcopy conversion is free of mistakes. Even if lawyers operate on the basis that their legal data analytics tools are suggesting trends based on reliable data, they should note that if the reliability of the data is questionable, their predictions and therefore advice to their clients may quickly become incorrect or irrelevant.

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[23] "Premonition" (*Premonition.ai)*<http://www.premonition.ai> accessed 7 January 2017.

[24] 'Court Data' (*Premonition*) <https://premonition.ai/court-data/> accessed 8 January 2017.

### iii. Novel Issues in Litigation

Data analytics may be less useful in situations where the lawyer is arguing for a novel issue. The law, or at least the common law, is a continuously evolving behemoth. It is therefore not surprising if lawyers present a novel issue before the judges, in the hopes of succeeding and creating new law. Here, while big data may provide insights on how successful certain cases will be in a jurisdiction, this insight that is premised on established claims may be inapplicable when the lawyer is presenting a novel claim. Lawyers must thus be careful when relying on big data analytics to advise their clients as they should not provide false expectations to their clients, failing which, they may become liable for professional negligence. The next section will discuss professional negligence and the ethical duties of lawyers vis-à-vis clients.

## III. EthicalDuties of Lawyers vis-à-vis Clients

Generally, lawyers must be admitted to a bar association in their respective jurisdictions before they can practice law or represent a client before the court. They are usually bound by ethical codes and regulations, which lawyers owe to their clients and the profession. Lawyers are regulated by both common law tradition and civil law tradition jurisdictions. The difference therein lies in what duties and obligations are present in each jurisdiction's legal profession rules and how strict these are regulated by the relevant institution. This duty is usually enshrined in an ethical code for lawyers, the rules of which are enforced by the state or jurisdiction's bar association and lawyers must adhere to their respective ethical code.

Lawyers owe several duties such as the duty to act in their clients' best interest and the duty of confidentiality. One specific duty of the lawyer that is important in this discussion is that of the lawyer's duty to their clients to act with reasonable diligence and promptness. Under US law, most states use the American Bar Association's Model Rules of Professional Conduct ("ABA's MRPC") as a guideline.[25] Lawyers are expected to act with competence and diligence and according to Rule 1.1 of the ABA's MRPC, competent representation is defined as "require[ing] the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation".[26]

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[25] 'Model Rules of Professional Conduct' (*American Bar Association*) <http://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct.html> accessed 8 January 2017.

[26] 'Rule 1.1: Competence' (*American Bar Association*) <http://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct.

The ABA has provided further guidelines; as per Comment [1] of the ABA's guidelines for Rule 1.1, one relevant factor determining the competency includes "the preparation and study that the lawyer is able to give to the matter."[27] Comment [5] elaborates on when a lawyer is competent in his or her preparation; "competent handling of a particular matter includes inquiry and analysis of the factual and legal elements of the problem, and use of methods and procedures meeting the standard of competent practitioners".[28] The thoroughness of preparation depends on "in part by what is at stake", i.e. a major litigation suit may "require more extensive treatment that matters of less complexity and consequence".[29]

Further, Rule 1.3 of the ABA's MRPC states that "a lawyer shall act with reasonable diligence and promptness in representing a client".[30] The lawyer should "… take whatever lawful and ethical measures are required to vindicate a client's cause or endeavor."[31] Based on these comments by the ABA, it can be discerned that a lawyer's standard of competence in the use of methods and procedures is held to that of a competent practitioner and the complexity of the case, coupled with the general need for lawyers to seek lawful measures to resolve his or her client's disputes. These ideas will form the backdrop for the later discussion on whether a lawyer is deemed to have breached his ethical duties if he fails to use big data analytics when evaluating a litigation lawsuit for his or her client.

It should be noted that this duty of diligence and competence is not a US-isolated requirement. In other common law jurisdictions, such as the UK, lawyers – both barristers and solicitors – are expected to act diligently and competently when serving their clients as well.[32]Such a duty is similarly imposed in countries following the civil law tradition such as Austria.[33] In this regard, the duty of diligence and competence appears to be a rather

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html> accessed 8 January 2017.

27 'Comment on Rule 1.1: Competence' (*American Bar Association*) <http://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct.html> accessed 8 January 2017.

28 Ibid 5.

29 Ibid.

30 'Comment on Rule 1.3: Competence' (*American Bar Association*) <http://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct.html> accessed 8 January 2017.

31 Ibid.

32 'Ethics' (*The Law Society*) <http://www.lawsociety.org.uk/support-services/ethics/> accessed 15 January 2017.

33 Rechtsanwaltsordnung [RAO] [Act on Attorneys] Reichsgesetzblatt [RGBl] No. 96/1868, as amended,<https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10001673> (Austria), §1.

uniform requirement of lawyers, although each jurisdiction may differ in the standard in which they hold their practitioners to. This will similarly serve as an interesting discussion art Part IV.d's discussion on how lawyers from the developing and developed world may be held to different standards on using big data analytics.

When a breaches the aforementioned duties of competence and diligence, he can be found guilty of professional negligence. The ABA provides that a lawyer can be disciplined and be subject to professional misconduct if the lawyer "violates or attempts to violate the Rules of Professional Conduct".[34] The critical issue is therefore when a lawyer will be deemed to have breached his standard of care to his client if he fails to use data analytics in his litigation case, therefore resulting in higher costs for his client or even the loss of the case itself, and be subject to discipline.

## IV. The Perplexities of a Modern Client's Demands

Compared to a lawyer 30 years ago, where using laptops were not mainstream nor were smartphones invented, the lawyer of 2017 works with a wide array of technology gadgets: smartphones (or sometimes two), laptops, online research databases – the list goes on. This does not mean that clients have not caught up – one can receive a client's e-mail instructing to commence litigation around midnight, after working hours.[35] It would not be unsurprising if clients demand lawyers to use high-tech methods to litigate cases to increase their chances of winning, or reduce legal costs by improving efficiency. The lawyer must keep up with his modern client's demands, and bearing this in mind, this article will analyze the following issues arising from the use of big data in litigation: (i) the impact of big data analytics on litigators; and (ii) whether a lawyer can be disciplined for failing to use big data analytics in litigation.

### A. The Impact of Big Data Analytics on Litigation Lawyers and the Legal Industry

The introduction of big data analytics into practice have impacted litigation lawyers in a myriad of ways, from (i) greater advantages from the insights in strategizing litigation lawsuits; (ii) increases in the transparency

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[34] 'Rule 8.4: Misconduct' (*American Bar Association*) <http://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct.html> accessed 8 January 2017.

[35] This is based on the co-author's own experience at a law firm.

of information relating to the performance of litigation lawyers, to (iii) how affordability of these analytics services affects competition amongst law firms.

### i. Advantages of Big Data in Litigation Cases

The virtues of the use of big data in litigation cases have been extolled by several commentators. Some of these advantages include allowing lawyers to "determine profitability of a case type",[36] engage in "more efficient discovery",[37] "have an edge before the trial begins",[38] and "predict the legal system";[39] others have mentioned that a "slew of services… are offering far more granular information about judges".[40] While it appears that several big law firms such as Dentons, Squire Patton Boggs, and Morgan Lewis have jumped onto the legal analytics bandwagon and signed up with LexMachina,[41] and articles commenting on the potential usefulness of big data and law, it remains difficult to conclude with certainty that the costs incurred in subscribing or developing such legal analytics tools translates to actual value for the firm or the client or both. Big data in law is a relatively new trend, and it may thus take time before a representative study on the results of these legal analytics tools will be available. To this end, it will be necessary to monitor this industry and await for reports, studies or even balance sheets of these legal analytics providers before determining whether big data has indeed provided lawyers with advantages that are value for what it's worth.

### ii. Increase in Information Transparency on the Performance of Lawyers

With algorithms and software such as '*Premonition.ai*' that can check how lawyers perform before judges, it means that information on the performance of lawyers is now available publicly. This can reduce the information asymmetry between lawyers and clients, and also allows clients to have a clearer idea of how the lawyer that he intends to engage will generally perform in a given case, based on statistics.

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[36] Dan Steiner, 'Data Analytics and Your Law Firm' [28 April 2016] *Law Technology Today* <http://www.lawtechnologytoday.org/2016/04/big-data-law-firm-data-analytics-influencing-cases/>.

[37] Ibid.

[38] Ibid.

[39] Ibid.

[40] Sara Randazzo, 'Data Tools Offer Hints at How Judges Might Rule' *The Wall Street Journal* (December 13, 2016).

[41] 'Law Firms' (*LexMachina: Lexis Nexis*) <https://lexmachina.com/law-firms/> accessed 8 January 2017.

Another effect of this increase in information transparency through big data analytics is that a litigator's experience in the field is now substitutable with reports provided by big data, i.e. the substitution of information gained from experience with information gained by data. Previously, it would be imprudent for a litigator to sift through every single US state court case or US Federal Court case to determine which jurisdiction is the best to commence, say a patent lawsuit or securities lawsuit due to voluminous work that can be cost inefficient. Knowing where to commence a lawsuit is based on experience, after having fought multiple cases and read leading authorities, digests or cases on the subject. However, all this information is now available with a few clicks from the computer that can predict trends quickly, such as in '*LexMachina*' or '*Premonition*'. This prediction maybe even more accurate as the computer system can screen through much more cases in a shorter period of time than a human can.

If such knowledge gained by experience is so easily replaceable, and with data tools tracking performance, litigators have to keep up with the legal landscape by offering analyses that computers or big data cannot provide, e.g. offering brainstorming and providing the client with multiple possibilities to prevent a loss or a pyrrhic victory, and to hone his skills and abilities in this field to not be earmarked as a poor performing lawyer by clients.

### iii. Affordability of Legal Analytics and Competition in Law Firms

The availability of resources a lawyer can work with is dependent on how much his or her firm is willing to pay to subscribe to the relevant databases and services. While there are propositions that "by analyzing case outcomes and the legal system on a regular basis, big data can level the playing field, offering small firms the same advantage that big firms have",[42] it is respectfully suggested that this depends on whether small firms may even be able to afford the big data analytics services to begin with. As the prices of Premonition.ai, Bloomberg Law Litigation Analytics and LexisNexis' *LexMachina* are not published online; it is difficult to determine whether the costs of such services are value for money to small, boutique law firms that may be cost conscious or have a lesser margin to pay for such services.

While big data does allow law firms to compete on an equal playing field since small firms working with lesser associates can provide results or analyses similar to big firms that have more manpower, this argument is premised

[42] Dan Steiner, 'Data Analytics and Your Law Firm' [28 April 2016] *Law Technology Today* <http://www.lawtechnologytoday.org/2016/04/big-data-law-firm-data-analytics-influencing-cases/>.

on the fact that the small law firm can afford to commit funds to conduct research and development in legal innovation,[43] or justify paying for the big data services to begin with. This then leads in to the next question – if a law firm, big or small, does not use big data analytics in his or her work and it is arguable that there are large benefits from using such legal analytics services, should he or she be in breach of his professional ethical duties as a lawyer?

### B. Can a Lawyer be Disciplined for Failing to use Big Data Analytics in Litigation?

Based on the ABA's guidelines, a lawyer's standard of competence in the "use of methods and procedures" is pegged to that of "competent practitioners".[44] What is a competent practitioner is dependent on the standard of the industry at that given time when the client files a complaint. Is a practitioner thus incompetent if he fails to use big data analytics? While some big law firms and certain specific lawyers have infused big data analytics in their legal practice or extolled the virtues of big data respectively, there is still data lacking in how many firms exactly have adopted or used such services in their prediction of litigation suits. Currently, it is thus difficult to confirm whether not using data analytics tools during practice is deemed to be incompetence on the lawyer's part.

While lawyers are expected to keep "abreast of changes in the law and its practice",[45] this is not an obligation but rather an appeal to ensure that lawyers remain up-to-date in their own market. In the case of big data analytics whereby this technology is relatively new, not all lawyers may have used nor even heard of this technology. The legal industry, however, may become more receptive to this if clients demand such legal analytics to be infused in the lawyer's legal opinion. If the provision of data analytics reports to better strategize litigation is what is expected of the average client that walks into the firm, then there may be a stronger argument that a lawyer who fails to use legal data analytics may be deemed incompetent. The disciplinary tribunals may have a stronger case if the respective Bar Associations or the ABA have dictated that practicing lawyers must complete legal data analytics courses and strongly recommends lawyers to consider such reports when advising their clients. As of present, it appears that no bar associations have indicated that the use of big data in litigation is compulsory – therefore, this

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[43] Bryan Cave, 'Purposefully Structured for Innovation' <https://www.bryancave.com/en/about/innovation.html> accessed 8 January 2017.

[44] 'Comment on Rule 1.1: Competence' (*American Bar Association*) <http://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct.html> accessed 8 January 2017.

[45] Ibid.

remains a relatively open-ended question until further guidance is provided by the regulating authorities of the legal profession.

Ultimately, however, as much as data analytics can be useful in providing litigators and clients with a clearer idea of the landscape and environment that they are operating in, the litigator still needs to make his judgment call on how to proceed with the suit. Big data analytics is used to assist the litigator in making a more informed choice, rather than to advise or convince the lawyer to commence litigation in a specific manner and jurisdiction. In short, the machine provides information and reports, and the litigator decides. Thus, save for a failure on the part of the data analytics tool, the litigator should remain liable and responsible for his decisions in the litigation suit after having reviewed the data analytics reports – this includes situations where the litigator misinterprets or misrepresents the trends and predictions as provided by the data analytics report to his clients. An experienced litigator in his field of expertise should suspect the accuracy of the report if he feels that it is incorrect because of perhaps the lack of case sample size when producing the report, or if the data set used is unreliable or incorrect. Litigators must thus be careful as it is possible that a litigator can remain liable to disciplinary action if he or she misinterprets or misrepresents the trends or predictions provided by the data analytics reports. Otherwise, presently, it appears that the provision of big data analytics is more of a complementary perk to the client rather than a compulsory obligation.

## V. Big Data x Litigation in the Developing World

Big data is possible because of a combination of factors, which can be generally categorized in three areas: hardware, software, and data availability requirements. The research and development of big data analytics is possible because of the large voluminous of data made available to a powerful enough computer that can process the information expediently and a well-developed software algorithm that can sift and detect the data markers set by data analysts. Countries that have this means can expend sufficient resources to digitize hardcopy cases, and have sufficient expertise and funds to develop the necessary software and hardware infrastructure required. Legal analytics service providers have generally covered jurisdictions in the developed world such as the US, UK, Australia and France.[46] What is common with

[46] 'Premonition' (*Premonition.ai)* <http://www.premonition.ai> accessed 7 January 2017;"Predictice" (*Premonition.AI*) <https://premonition.ai/law/> accessed February 28, 2017.

these jurisdictions is the easy access to digitized case law or judicial decisions that allows data analytic tools to work with.

This section thus intends to explore the use of big data analytics in developing countries, including the inconsistent development of such tools for legal markets. For a more focused discussion and in consideration of the audience, this article will use India as a case study for the subsequent analyses. In India, digitization of cases or judgments has been in effect and the amount of digitized cases are sufficient for legal support service providers to confidently provide a database for such cases, and for some databases, to even provide data analytics tools based on the digitized content. For example, local legal databases such as *Manupatra* has provided "Analytics & Visualisation Tools"[47] that provides users with a range of services to ease conducting legal research.

While *Manupatra* has a "Judge Analytics"[48] function, this service intends to give "analytics of judgments written by Hon'ble judges of Supreme Court & Delhi High Court (…)". Data analytics tools such as advising which lawyer performs best before which judge, similar to Premonition's tools to find "which lawyer wins for your case type and judge",[49] are still unavailable in India, although with strong digitization policies in place, it may be a sooner than later thing that startups in India will provide services similar to that of their US counterparts such as *Premonition* and *LexMachina*. If such data analytics tools are less developed and available in developing countries, the standard of competence for a lawyer in such countries vis-a-vis using legal technology will most likely be held to be lower than countries where such tools are more widespread. As bar associations are jurisdiction specific, it is ultimately the decision of the bar committee in that country to determine what is the expected technological know-how for their lawyers.

With mass digitization undertaken by developing countries, will this unevenness in provision of data analytics in litigation between developing and developed countries be narrowed in the future? In countries wherein organizations are actively digitizing and archiving case law, these developing countries have the available data to churn out big data reports. However, whether initiatives within that jurisdiction will develop initiatives to exploit such data for litigation purposes remains to be seen - this depends on a jurisdiction's technology policies and perhaps even litigation culture, i.e. whether litigation as a dispute resolution method is often pursued. It is however not

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[47] 'Manupatra' <http://www.manupatrafast.com/> accessed 28 February 2017.
[48] Ibid.
[49] 'Premonition' (*Premonition.ai)* <http://www.premonition.ai> accessed 7 January 2017.

conclusive that law firms operating in developing countries are immune to this wave of digitization and be eventually compelled by clients to use big data analytics in their litigation suits.

## VI. The Future

The adoption of big data analytics in work is, in our opinion, a rather inevitable process. As ea greater number of clients become acquainted with big data and see the value of using big data in the workplace, it would not be surprising for clients to expect their lawyers to keep up with the times and infuse big data in their legal work as well. For major litigation cases where the stakes are higher for the litigator to be successful, the client's demand on lawyers to produce data analytics reports to strategize the claim will be more acute. Even though the ABA and most jurisdictions have yet to impose on lawyers this need, practitioners in this field – especially those often dealing with complex litigation suits and demanding, tech-savvy clients – should not be surprised if this eventually becomes a standard service option or eventually a requirement to be provided to clients. After all, as the world embraces technological advancements, law firms should develop technologically as well in order to keep pace with modern reality.